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CLINICAL LECTURES

ON CASES OF

DISEASES OF THE NERVOUS SYSTEM;

DELIVERED AT KING'S COLLEGE HOSPITAL

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BY

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LECTURE III.

HYSTERIA.

I PROCEED to-day to offer some remarks to you on hysteria with reference to cases which we have had under observation.

It would be superfluous in me to enlarge upon the importance of your having accurate views of the characteristic signs and symptoms of this disease. You all know how frequent a malady it is, and you doubtless also know how various are the symptoms it exhibits, how apt it is to mimic other diseases affecting the most different parts of the body; and so accurately does it simulate the characters of disease of more serious import, that it will often deceive the physician, and that it always requires the greatest care and discernment to distinguish the hysterical from the organic malady.

I shall discuss this subject under the three following divisions:—First, its history, which I shall illustrate by the cases; secondly, its pathology; and, thirdly, its treatment.

Hysteria shows itself as an affection disturbing the whole system, and although always present in a degree, it is very apt to break forth at times with all the phenomena of a severe paroxysm. This is the hysteric fit or paroxysm which, while it manifests great variety as regards its symptoms and its severity, yet possesses certain characters which are constant and distinctive. It may be more readily confounded with epilepsy than with anything else, but it often presents some resemblance to chorea.

The hysteric state of constitution is indicated by a greater or less degree of excitability, which places the patient more under the control of her emotions than of her will. She is easily excited to laughter, and that laughter is with difficulty restrained or controlled; or she falls quickly into tears; and passes from tears to laughter, and back again from laughter to tears. The laughter is wild and unmeaning; it is more calculated to excite pity in others than merriment; the patient weeps as if ashamed of herself for laughing without cause, and she laughs again, as if conscious that she must appear ridiculous to the bystanders.

At times, however, these fits put on a much more serious appearance, and are complicated with irregular affections of motion and of sensibility. The former manifest themselves as convulsive movements, or sudden jerking ones, resembling those of chorea; shuddering or shivering, so as to resemble a severe rigor, with chattering of the teeth, are of very common occurrence; frequent sighing and sobbing may also be mentioned as very characteristic symptoms. The affections of sensibility are numerous and various. They frequently precede the paroxysm, and often remain after it has abated. One of the most common, which is generally a precursor of the paroxysm, is that which is known by the name of *globus hystericus*, a sensation as if a ball were rising in the throat, impeding free respiration, and giving rise to a feeling of choking. Many hysterical patients are constantly subject to globus as their principal symptom. It is, indeed, one of the most constant accompaniments of the hysterical state.

Another disorder of sensation very frequent in hysteria is that to which the name *clavus hystericus* has been given,—a fixed pain, occupying a very small extent of surface, and causing a sensation as if the part were being transfixed by a nail. Some part of the cranium is a frequent situation for this pain, and perhaps it occurs nowhere more frequently than at the supraorbital notch, where the frontal nerve emerges upon the forehead.

Hysterical patients frequently suffer from headach; a sensation of a weight on the top of the head is very commonly complained of. Pain in either side, beneath the mamma, is also a symptom of great frequency, and has

been often treated as pleurisy. According to my experience the left side is oftener complained of than the right, and if the pain be accompanied with palpitation of the heart the patient or her friends become alarmed lest there should be disease of the heart.

The proneness to the development of gas in the alimentary canal, causing distressing flatulence, is one of the most remarkable phenomena of hysteria. Some women suffer from the accumulation of flatus to a most distressing extent, and from the rumbling noise which its passage from one part of the intestine to another occasions, it becomes painful to them to be in society. It is remarkable how few women are exempt from this hysterical symptom; many have it who evince no other indication of hysteria, and in all who are subject to it it is brought on or greatly increased by any cause exciting the emotions or the feelings. The sensation of globus is always connected with the development of flatus in the stomach. In rare cases gases are developed in the uterus.

The hysterical patient is very apt to manifest great irritability under the least pressure in various parts of the body. When pressed she shrinks with much more expression of pain than if there were really painful disease. In no place is this extreme tenderness more common or more severe than over the spinous processes of the vertebræ, and it generally appears to effect some one part more than another. And from the dread of spinal disease the attention of the patient, her friends, and consequently of her medical attendant, will frequently be directed chiefly or exclusively to this symptom, as if her complaint were chiefly seated in the spine, or originated there. But you will generally find that the irritability is by no means confined to the spine, and that frequently, when you can succeed in directing your patient's attention to some other object, she will cease to wince when pressed upon.

Among the various derangements of sensibility we meet with none more frequently than vague pains in the limbs, very commonly in the thighs and legs, sometimes following very distinctly the course of particular nerves. I have very often observed instances of pain in the course of the ulnar nerve, and in that of the intercosto-humeral nerves, or the nerves of Wrisberg, cutaneous nerves which pass down the inside of the arm to the ulnar side of the region of the bend of the elbow.

The hysterical fit is most commonly of short duration, and is quickly recovered from, the patient appearing to wake up as if roused from sleep, uttering a loud exclamation, or with a burst of tears or of laughter. Sometimes she remains faint and exhausted, but sensible. When there have been convulsions with insensibility, the quickness of the recovery may serve to distinguish the fit from one of epilepsy, in which the return to sensibility is generally attended with somnolency and headach.

There often remains after the hysteric paroxysm has passed off some local derangement, a painful spot, or numbness of some part, of a limb or of a segment of one; or a paralytic state, which may, as in one of the cases we have seen in the hospital, exhibit the appearance of hemiplegia.

The term hysteria implies a connection between the phenomena of the disease and the uterine functions,—*ὑστερα*, the womb,—and, although we cannot limit this state of constitution to the female sex, there can be no doubt that it is infinitely more frequent in women than in men, and that in the former deranged uterine action is almost an invariable antecedent or concomitant. The derangement of the uterine action may show itself in any of the following ways. Menstruation may be regular, but the catamenia are scanty. It may be regular, but attended with pain and difficulty (*dysmenorrhœa*). It may be irregular, passing over two or three or more months. It may be too frequent, occurring twice in a month, or once in three weeks. There may be leucorrhœa present, or there may be too profuse menstruation, attacks of menorrhagia.

And when we reflect upon the real nature of the catamenial function it cannot surprise us that any irregularity of it should occasion so much disturbance. It is probably, chiefly and primarily, an action of the ovary by which ova are thrown off through the uterus, as in a hen that has not been trodden by the cock, unimpregnated eggs are developed by the ovary and rejected through the oviduct. The action of the ovary may be regarded as one of excretion, by which certain elements are separated from the system; and, when suppression of that excretion occurs, or when it is imperfectly performed, it is reasonable to expect that more or less of general constitutional disturbance will ensue.

I believe it to be rare for hysteria to occur in cases where the catamenia have never appeared—in confirmed chlorosis. The commencement of the ovarian and uterine function is a period fraught with important consequences to women, for then, and in general not until then, all hysterical symptoms are apt to show themselves.

In men a train of symptoms may frequently be witnessed essentially similar to those which constitute hysteria in women, and the same general state of constitution is also present. In men the phenomena are not generally so prominent as in women, nor are they so numerous. The disease, as in women, is frequently connected with the sexual function, the subjects of it having become enervated by the practice of masturbation, or by too frequent sexual intercourse, or by the

frequent excitement of passion without the opportunity for its gratification.

There are many indications in the hysterical constitution to show that general nutrition is defective. We observe a general want of tone throughout the whole system; great laxity and softness of the tissues; the functions are carried on sluggishly and with irregularity. Many of the secretions are deranged; the biliary system does not act freely; the urine is frequently copious and limpid and clear as water, of specific gravity very little above that of water, a symptom which Sydenham regarded as pathognomonic; or it is scanty, loaded with lithates, and often depositing red sand in considerable quantity. The power of the patient to maintain a uniform temperature is greatly impaired, and her heart either speedily sinks below the proper standard, or quickly rises above it, in accordance with the state of the surrounding atmosphere.

Having now pointed out to you several of the most important features of hysteria, I may next proceed to direct your attention to some of the cases which illustrate my remarks.

Case 1.—There is first the case of Marianne Rothwell, ætat. 17, at present in King's College ward. This girl affords a good example of the hysterical constitution. She has, to a marked degree, the full upper lip so frequently to be noticed in women of this exciteable temperament. She was always healthy until three months after her menses showed themselves. During those three months the menses continued regular and her health remained good; but the fourth month the flow was scanty, and has continued so ever since at each subsequent monthly period, lasting only a single day, and being attended with considerable pain in the loins and in the back of the head, with loss of appetite and nausea. To these has been added, within the last six months, that frequent attendant on hysterical complaints, leucorrhœa, a certain indication of uterine or vaginal irritation.

In this girl we find many of those remarkable nervous phenomena which are characteristic of hysteria. She is frequently troubled with globus; she is easily excited, and when she cries has great difficulty in preventing the long continuance of the fit. She has frequently the sensation of insects creeping along her flesh, especially up the left side. She also complains of fixed pain in her left side. She is liable to fainting fits and to numbness in the course of particular nerves.

This girl was brought into the hospital in the night of the 5th of June, in an unconscious state, shivering violently, her teeth chattering, unable to answer questions, but talking incoherently; she could not be roused by shaking her or speaking loudly to her. Before she came in she had been frequently soused with water without avail; she was, however, speedily brought to her senses by flipping the soles of her feet with a towel and striking them with the palms of the hands, and by the administration of a little ammonia.

On coming to herself she stated that she had been attending a Wesleyan meeting that evening, where she met several friends, but says she was not excited much more than usual. On returning home in company with her mother she complained of severe pain in the left side, followed by faintness, which passed off; the pain in the side, however, increased to such an extent that she could hardly walk, and, while passing near the hospital, she was again seized with a sudden sensation of faintness, and lost her consciousness, being unable to remember anything until she found herself in bed at the hospital after an interval of four hours.

The next day she complained of soreness all over her, as if she had been beaten, and experienced a good deal of the sensation of globus; shivers occasionally, her teeth chattering, and her body trembling; and complains of coldness and numbness of the feet.

On the 7th of June we found that she had fainted several times since the previous evening, and that she had also frequent fits of sobbing, alternating with lightness of spirits. Still feels the ball in her throat; her feet are still very cold and numb; slept well; bowels confined; the pain has shifted from her left to her right side. To have purgative medicines immediately.

June 8. No faintings; pain in the right side very troublesome, it extends along the back; she has also pain in her right shoulder when she attempts to lift the arm.

June 9. To-day she had quite the appearance of a person labouring under hemiplegia of the right side, excepting that her face was not affected. There was considerable weakness of the right upper and lower extremities, and in walking she dragged the right leg almost as a hemiplegic patient would do. She has pain and numbness down the arm and leg.

These symptoms passed off in two or three days, and on the 14th she was seized with another hysterical paroxysm. About nine o'clock in the evening she suddenly jumped out of bed and ran down stairs into the Adelaide ward, where she was soused with cold water, which brought her round, and she was then carried back to bed. During this time she was quite unconscious of what was passing. She tore her hair, threw her arms about, and sobbed violently. To-day (15th) she has pain in the head and numbness of the right side of the chest. Bowels confined.

Under the use of a general tonic treatment, attention to the state of the bowels,

and shower-baths, this young woman has greatly improved in health.

The paralytic state which showed itself on the 9th was very curious. It was an excellent example of the hysterical paralysis, arising, probably from a temporary and transient disturbance of the nutrition of the sensitive and motor nerves of the extremities.

Case 2.—In another case we find an example of hysteria apparently passing into epilepsy. Rebecca Pilbear, ætat. 21, a servant of all-work, and probably of hard work also, enjoyed good health until she was of the age of fifteen, when her catamenia appeared. About this time she states that she became subject to fits which, according to her description, must have been of an hysterical nature. They came on with globus, occasioning a sense of suffocation, and this was speedily followed by an irresistible desire to throw herself about (emotion controlling will). After this violent exertion had lasted for about half an hour, she would fall into a deep sleep, which would continue for two or three hours; during these fits she never bit her tongue nor foamed at the mouth, but she was told that she used to clench her hands and grind her teeth. Six months ago these fits become altered in their character; she ceased to have any globus or other premonitory warning; she would fall down suddenly deprived of sense and motion, and remain in that state for half an hour. She has been found lying in that state in the kitchen without being at all aware how the fit came on. For some time before these fits come on she is apt to be drowsy, and dreams a great deal.

This patient was sent into the hospital in consequence of these fits. She was quite well during her sojourn here, and as she showed no tendency to a recurrence of the fits while in the hospital, I did not think it right to keep her in longer, and she certainly did not, during that time, show any very marked indications of the hysterical state of constitution.

Case 3.—I shall briefly allude to a third case, which excited a good deal of interest in consequence of its resemblance to an apoplectic state, or one of cerebral oppression from some other cause. Anne Rollins, ætat. 18, a servant of all-work, who had come from the country and been only a few months in London. This patient had been gradually getting into bad health for some weeks before this attack, and she was suffering from suppression and great irregularity of the catamenia. The change from a country to a London life had, no doubt, contributed largely to produce this. She was brought into the hospital in a state of almost complete insensibility. She appeared in a state of excessive drowsiness, but by loud talking and much shaking she could be roused so as to give a monosyllabic answer, after which she would sink into the same somnolent state again. There was no stertor. The pulse numbered 80, but was small and very feeble. There was coldness of feet, and an evident tendency to a state of syncope. Pupils small, and did not contract. No paralysis.

It appeared, on inquiry, that on the evening previous to her admission she had suddenly fallen down, crying out that something had given way in her head, and she immediately fell into the insensible state in which she was brought to the hospital.

In the night after her admission she became delirious, and talked wildly; vomited after breakfast next day. During the whole of that day remained in a listless state, never speaking unless when spoken to, and then replying only in monosyllables. Face pale; surface cool; pulse 80, small; no deviation of the tongue; urine copious; bowels confined.

There were many points in this case calculated to excite apprehension lest some organic mischief were going on in the brain. Inflammation of that organ often steals on insidiously with little or no more warning than that afforded by the symptoms in this case; yet I felt convinced, from the first moment I saw the girl, that the phenomena were of the hysterical kind, and, I confess, that I was led to form this opinion more from the general aspect of the patient than from any particular symptoms. Her countenance was decidedly indicative of the hysterical temperament; she had the full upper lip well developed, and her symptoms, although essentially the same as those often present when serious lesion was commencing, appeared of that exaggerated kind to which the mimic symptoms of hysteria almost always belong. Mimicry is generally an exaggerated representation of reality, and so the merely hysterical or nervous actions frequently exaggerate the symptoms which more serious disease puts on. And let me here advise you to accustom yourselves to observe the physiognomy of disease. No description, however accurate and graphic, can leave the same impression as that derived from actual observation frequently repeated. How often does the surgeon profit by a well-educated touch! You must endeavour to obtain a *visus eruditus* as well as a *tactus eruditus*.

The progress of this case fully justified the opinion I had formed. The patient had been treated with purgatives sufficient to produce moderate action of the bowels, and with small doses of ammonia frequently administered. On the third day, finding that there was great disposition to coldness of the extremities, I ordered three ounces of wine, and improved her diet. She recovered gradually from the drowsy listless state, and was able to walk, and to take more nourishment and stronger tonics, her chief complaint being the pain across the forehead. After a

month's sojourn in the house she had improved sufficiently in strength to enable her to undertake a journey into Yorkshire, where her friends lived, and whither I advised her to return.

The last case to which I shall refer you illustrates some of the hysterical symptoms as they occur in the male subject.

Case 4.—John Bruce, ætat. 22, a single man, a porter, was sent in here as a case of paraplegia, which it was thought originated in an injury. He has been a teetotaller for some time, having been induced to become so in consequence of believing that his father shortened his life by hard drinking, and seeing the evil consequences of drunkenness in his brothers, who are addicted to that vice. He had been quite healthy until ten months ago, when he met with an accident by which he injured his back and loins, and struck the back of his head so violently as to stun him for a short time. States that he kept his bed for three months after the accident, during which time his appetite continued very bad, and he felt extremely weak and languid.

The weakness is by no means limited to his lower extremities, but affects his whole body. The difficulty of walking or standing is evidently more connected with general languor and depression of his nervous power than a local paralysis. He passes large quantities of pale urine; suffers greatly from dejection of spirits; is very subject to flatulence; has pains flying about his hips. On examining the spine it was found to be exquisitely tender, and when touched at any part, especially over the spinous processes, he cried out much more loudly and with more expression of suffering than a patient would do who was affected with caries of the vertebræ. His tenderness, however, was not confined to the spine. Whenever pressure was made on the ribs, the scapula, the arms, the same shrinking and exclamation at pain took place.

This patient looked pale and ill-nourished. The red particles were evidently deficient in his blood. He had much the appearance of a man who was addicted to the vice of masturbation, and I strongly suspected his symptoms were attributable to this cause.

The patient improved considerably under a course of shower-baths and tonics, quinine, with sulphate of iron, and good diet. His temperance principles induced him to refuse porter, and I did not deem it advisable to urge it upon him.

Dr. Watts shows that the cerebro-spinal system of nerves is not in any way remotely affected by poisons, but that the remote and primary impressions of these are received by the sympathetic system, which supplies the coats of the blood-vessels and all the organs of so-called vegetative life.

CLINICAL LECTURE

ON

DISEASES OF THE PUERPERAL STATE,

DELIVERED AT THE ROYAL SCHOOL OF MEDICINE, BIRMINGHAM,

By J. T. INGLEBY, M.D.,

Fellow of the Royal College of Physicians, Edinburgh, &c.

Gentlemen,—Pregnancy is not unfrequently complicated with diseased conditions of the womb of the non-malignant kind, and especially with fibrous tumour, the most common disease to which the uterus is exposed. The disease originates in the proper tissue of the womb, to which it bears considerable resemblance, and may be developed at any period of life, from puberty to the final cessation of the catamenia, or even later, in married and single women, indiscriminately. Fibrous tumours undergo certain changes, according to the direction which they ultimately take, whether towards the peritoneal envelope of the womb or its lining membrane. They vary very greatly in their number, form, size, consistence, and their mode of connection with the adjacent tissue; sometimes they are distinctly encysted; more frequently, however, we fail to recognise any traces of encysted structure. In the more extensive of these tumours, which are associated with pregnancy, a train of evils, both local and constitutional, are likely to ensue as the result of such a complexity. Some of these occur early in pregnancy, abortion, for instance; some in advanced pregnancy, from inflammation of the substance of the tumour, indicated by pain in the region of the uterus, vomiting, &c., the distress increasing with the increasing supply of blood. Difficulties also arise during labour from mechanical obstruction and the altered axis of the uterus; and also after delivery, hæmorrhage and inflammation of the serous membrane being the chief. To one of these cases your attention will be directed this evening,—a case of deep interest and practical importance, not only to yourselves as students, but the profession generally, and involving points of high moral responsibility.

Case.—Mrs. ——, ætat. 40, about fifteen months ago perceived a hard flat tumour on the right side of the abdomen, at which time it appeared to be as large as a full-sized apple. Being under a matrimonial engagement she made an inquiry from some medical friends whether the presence of the tumour could be regarded as constituting a serious objection to the proposed marriage. The reply was in the negative, and she was married on the 4th day of March of last year. The last menstrual period commenced on the 14th day of the same month,

and continued until the 22nd. Shortly afterwards, within two or three weeks, she became low-spirited and hysterical, and the tumour began to increase, and was painful. I was called to see her, in consultation with Dr. Waddy, on the 18th day of September. She was lying on her back, in considerable pain, and yet comparatively easy when motionless, but the effort to change her posture occasioned so much suffering that it was with difficulty she was placed upon her side, to enable me to make a vaginal examination. The pulse was not particularly frequent, and the tongue was clean. For some time past her stomach had rejected almost everything she took, but was now tranquil. The bowels were alternately confined and relaxed. The urine had been discharged for some weeks past with considerable difficulty and with great frequency, but in both these respects she was somewhat relieved, doubtless by the increasing elevation of the uterus. She had neither thirst nor rigors; her sleep was much disturbed by attacks of a suffocating character. The left leg was œdematous but not benumbed. The breasts presented scarcely any characteristics of pregnancy; they were very small and flaccid, and there was a very slight and imperfect form of areola; the follicles, however, were certainly enlarged. According to my friend Dr. Montgomery, "a defective development of the breasts is always observed in cases of pregnancy conjoined with organic disease."

The abdomen, on the right side of the mesial line, from the brim of the pelvis to a distance of at least three inches above the umbilicus, was occupied by a large and firm tumour, the surface being raised at this part considerably beyond the level of the surrounding parts. My examination of this tumour did not occasion pain when pressed upon, but at other times the whole surface of the abdomen was so exquisitely tender as rendered the pressure of the bed-clothes intolerable to her. From its summit, or centre, the tumour took a sloping direction towards the mesial line, where it seemed to lose itself, and to pass insensibly into a diffused and moderately elastic swelling on the left side. This diffused swelling occupied a space on the left side, from the brim of the pelvis nearly to the umbilicus, extending, however, as deeply as possible in the iliac fossa, so that the left side and a portion of the back was distended by it. About the centre of this swelling, two inches above the brim of the pelvis, a very small, hard, projecting substance could be easily distinguished; with this exception the swelling felt quite smooth and even to the touch, and underneath it we distinguished the movements of a fœtus,—movements which the patient had experienced the preceding five or six weeks. At the upper part of this semi-elastic swelling we distinctly felt another hard tumour, of an irregular shape, apparently about a third part of the size of the large hard tumour, and evidently possessing similar characters.

The abdomen, therefore, contained three distinct swellings, viz., a large and firm tumour on the right side, a comparatively soft and diffused swelling on the lower half of the left side, and a small firm tumour on the upper part of the left side, having apparently continuous structures with each other.

The vagina was narrow and painful to the touch. A long and hard tumour descended behind the vagina, from the brim of the pelvis, posteriorly, nearly to the coccyx, its narrow end being downwards. The os uteri, which was almost close to the symphysis, was rather soft, and sufficiently open to admit the point of the finger; and there was barely room for a finger to lie either between the os uteri and the symphysis, or the os uteri and the tumour. The cervix uteri was preternaturally long and flexible, and yet owing to the impaction at the brim it was impossible to raise the uterus. On passing my finger between the uterus and the symphysis as high as possible, the structures which lay over the brim felt firmer than is usual in cases of simple pregnancy. On the left side of the pelvic brim the space was quite filled up, but on the right side of the brim there was less compression, owing, doubtless, to the large tumour having risen above the brim, and the gravid uterus being less closely packed within the brim at this part.

The complexities and difficulties of the most fearful kind having been represented to the family, an additional consultation was agreed upon, and we were joined by Mr. Wickenden and my colleague, Mr. S. Berry. The following points presented themselves for our deliberation.

First. What is the nature of the hard tumours?

Secondly. Does the softer tumour consist of the gravid uterus? and, supposing the reply to be in the affirmative, ought labour to be induced prematurely?

Relative to the first point.—The hard tumours presented the characters of the common fibrous tumour of the womb. It was noticed, however, that the free movement of the large tumour did not seem to move the tumour supposed to be the gravid uterus, a circumstance supposed to invalidate the above conclusion, but which we shall presently show was perfectly consistent with the diagnosis which had been formed.

Relative to the second point.—No kind of doubt was entertained as to the existence of pregnancy; the movements of the infant were satisfactorily ascertained. The *bruit placentaire* was very distinct, but we had no clear evidence of the pulsation of the fœtal heart; probably it was concealed by

the edge of the large tumour, or by the walls of the uterus, rendered very thick by masses of small-sized fibrous growths, almost innumerable.

The tumours had evidently undergone a most extraordinary amount of increase during the pregnancy, especially during the last month, and it was fearful to contemplate the still greater bulk they would almost certainly attain prior to the ninth month. It was supposed that the growth of the vaginal tumour would be relatively slow owing to its confined situation, and yet, in the event of the full term of pregnancy being completed, it was our impression that unless labour-pains had the effect of drawing the tumour above the brim, delivery *per vias naturales* would be impracticable. Consequently, the Cæsarian section would be called for under circumstances of the most unfavourable kind. In the course of a few days the constitutional disturbance had become severe, there was constant vomiting and purging, and a frequent pulse. These, in addition to extreme pain, especially in moving, and tenderness on pressing the tumours, could only be regarded as evidencing an inflamed and probably softened state of the morbid structures. The left leg had become more œdematous; the sense of bearing down, both posteriorly and anteriorly, was most distressing, and the strength was rapidly giving way. It was clear, not only that the danger depended upon the existing pregnancy, but that it would become increasingly severe as pregnancy advanced. We had to consider whether we ought to act at the instant or whether we might safely wait about a fortnight longer until the fœtus might be supposed capable of maintaining an independent existence. But it seemed to be uncertain whether the puncture of the membranes could be accomplished; for although the os uteri was accessible to the finger underneath the ossa pubis, the cervix (as already stated) had acquired a great increase in length, and took a curved direction over the pubes, and the finger, as high as it could be carried, came in contact with a very broad part of the tumour which pressed heavily on the neck. Even supposing the rupture of the membranes to have been accomplished, we were still doubtful whether the child could pass, for there was only about an inch and a half of space between the pubic bones and the tumour, which was immoveable.

Had the elevation of the vaginal tumour above the brim been found practicable, the main difficulties would have been removed, but the introduction of the hand into the vagina would have been essential to its accomplishment; for although I succeeded in passing two fingers within the vagina, they were so compressed as to be useless, and I was obliged to withdraw the second finger ere I could make a common examination. The attempt to act upon the tumour by means of a single finger would have been altogether futile, partly owing to its tenderness when touched, but mainly to its very peculiar form and its impaction at the brim of the pelvis, in connection, also, with the straining, which was so easily excited. Moreover, the whole of the brim of the pelvis was closely occupied by the gravid uterus, portions of which would necessarily pass in succession during the pregnancy from the left side to the right, just in exact ratio as the fundus ascended in the abdomen, and with it the large tumour which, at an earlier period of the pregnancy, must have occupied the whole, or nearly so, of the pelvic brim.

Considering the firmness of the several diseased growths (which appeared the same in all), we determined that it would be improper to treat the vaginal tumour by puncturing it, and in this determination we were fully justified by the examination of this tumour post mortem; for it was found not to admit of reduction by such a proceeding. I ought, also, to remark that it was impracticable to ascertain what part of the fœtus presented nearest the cervix uteri; the head could not be distinguished through the abdominal walls, and it has already been stated that the pulsation of the fœtal heart was inaudible. The risk of the presentation proving preternatural, and the uterus rupturing, was not to be overlooked. Supposing the presentation to be natural and delivery impracticable, the most favourable issue would have been the decomposition of the fœtal structures. The circumstances I have mentioned, taken in the aggregate, induced us to abandon the idea of attempting the rupture of the membranes. The prospect seemed most melancholy; we doubted whether the fœtus would enter the cervix at all, and supposing it to enter, we felt assured that artificial means for promoting the delivery would not be available, and we did not think the patient could survive her delivery, supposing it to take place. We ultimately agreed that the induction of labour seemed to be alike opposed to science and the interests of humanity. Our doubts were soon dissipated, for on Sunday morning, Oct 3rd, our patient was in violent labour-pains, but it could not be ascertained when labour ensued; for, with a single exception, there was no observable difference between the bearing-down pains which had harassed her for some weeks and the violent bearing-down pains which existed this day; but I now observed that the pregnant womb acquired great tension during the paroxysm, and gradually passed into its previous state of elasticity as the paroxysm disappeared. This was clearly a parturient action. I was now enabled to pass my finger two inches, at least, within the unnaturally lengthened and narrow cervix, which projected over the

symphysis pubis; but the tumour blocked up the far end of the cervix, and it was impracticable to reach the cavity or to feel any continuity of the canal of the cervix. In the evening of this day I renewed the examination, but with the same result. The vomiting was incessant and the bearing down most distressing. An opium and starch enema was injected from time to time, but without producing any relief.

On Monday, the 4th, the pain, vomiting, and purging, continued unabated. I examined late at night, but the parts had not undergone the least apparent change. I now directed a grain and a half of solid opium to be taken every fourth hour.

Tuesday, the 5th. No material change in any respect. To continue the opium pills.

Wednesday, the 6th. The pains had materially subsided; the vomiting had entirely ceased, but the purging continued unabated. *She was now unconscious of the movements of the infant*, and never felt them afterwards. Yielding to the patient's importunate request, I did not renew the vaginal examination, which always occasioned a long-continued aggravation of pain. But although the violent pains were subdued, the sense of bearing down continued so distressing that the sufferer remained on the night-chair for many hours together, and was with difficulty persuaded to return to her bed.

Thursday, the 7th. The patient continued very much in the same state as on the preceding day.

Friday, the 8th. I visited the patient at eight o'clock this evening and examined the abdomen very carefully. The pregnant womb was extremely tense (now permanently so) and imparted to the finger a sensation of hardness equal to the solid tumour. There was no return of active pain, but the bearing down continued very much as it had been some weeks past. At eleven o'clock this evening (three hours after my visit) a discharge of water took-place, followed, in an hour after, by a copious discharge of blood into the night-chair. The hæmorrhage continued throughout the night, and at seven o'clock on the Saturday morning the fœtus was expelled. The placenta was withdrawn from the womb (to which it was still attached) two hours afterwards. It was the smallest placenta I ever saw, considering the period of pregnancy. No further discharge took place; but the patient, now greatly exhausted, continued in a sinking state, and although temporarily recruited by brandy in gruel, the reaction was not long maintained, and she died about twenty-four hours after her delivery.

The child must have been dead for at least many hours, for the cuticle had desquamated in several places. It was very small, and the head was so compressible that the bones materially overlapped each other on making the slightest pressure over them. The head must have been crushed to the greatest possible extent in its passage by the tumour. The distance from one parietal protuberance to its fellow, under *slight compression*, was only one inch and seven-eighths; and from the posterior fontanelle to the root of the nose five inches. The circumference of the head measured ten inches. The length of the fœtus was sixteen inches, and yet its total weight did not exceed two pounds fifteen ounces. It is not possible to compute its age accurately. The patient was married on the 4th of March, and menstruated from the 14th to the 22nd. From the last-mentioned day to the 9th of October is comprised a period of twenty-eight weeks and five days, or two hundred and one days.

The evidence relative to the cause of the child's death is so strong as to leave very little doubt on the mind. The active paroxysms denoting the labour-pains ceased on the Wednesday, but from this time the uterus assumed a permanent form of contraction, and imparted to the finger a feeling equal in firmness to that of the morbid structures; indeed, they presented no sensible difference. Contrasting this with the alternate hardening and softening of the uterus during the three preceding days, I cannot hesitate in ascribing the death of the infant to permanent compression, and a similar change not unfrequently follows the extinction of fœtal life in an ordinary protracted labour. It may be thought that as the membranes remained entire the pressure on the child's body would be unequal to extinguish its life; but the length and duration of the pain and the immature condition of the fœtus seem to me to warrant an opposite conclusion. There appears to have been a material connection between the vitality of the fœtus and the local and constitutional distress. At any rate the distress subsided most strikingly from the time the fœtus ceased to move. The movements, when strong, never failed to induce immediate and considerable pain. In another case of fibrous tumour, about the size of a large egg, seated in the walls of the womb, and presenting a tumour in the right groin at the eighth month of pregnancy, this symptom at the present is time almost equally distressing; but in this last-mentioned case the constitutional symptoms will not warrant me in recommending the induction of labour.

The Body was Examined by Dr. Waddy Twenty-four Hours after Death.

On laying open the abdomen the large tumour came into view. It was partially adherent to the peritoneum which lines the abdominal muscles. This tumour, covered by peritoneum, was attached to the uterus somewhat behind and above the right Fallopian tube, by a small pedicle about an inch in length, and as thick as the thumb. The peculiarity of this connection will serve

to explain a circumstance already adverted to, namely, the gravid uterus not being moved in any sensible manner by the free movement of this tumour. The tumour was kidney-shaped, presented a mottled colour and a variable density, and on making a section of it, a portion corresponding to about a fourth part of the mass, from the peritoneal covering towards the centre, had undergone marked softening, being pultaceous, whilst the other part of the cut surface was very firm and without cavity. There was no cartilage in the structure of any of the morbid growths. This tumour measured seven inches and a half in its longest diameter, four inches in breadth, and four in depth, and weighed three pounds and two ounces. The tumour which lay superiorly was also attached to the fundus rather posteriorly, and to the right, and between the Fallopian tubes. The circumference of this tumour was nine inches. Its pedicle was an inch and a half long and very broad, being four inches in its circumference. It had a leaden hue, weighed about nine ounces and a half, and measured four and a quarter inches long, three in width, and nine in circumference. Its cut surface presented a firm, white, homogeneous appearance.

The pelvic tumour was drawn out and possessed nearly the same characters as the others. In shape it was pyramidal and *very pointed*. It was attached to the left side of the body of the uterus on its anterior and lateral surface. It was four inches and a half long, nine in circumference, and seven ounces in weight. The pedicle was an inch and a half long and three and a half in its circumference. On making a section of it, the cut surface towards its pointed termination was quite pultaceous, and yet firm in other parts. The uterus elsewhere presented very numerous (almost innumerable) small-sized fibrous tumours, varying in size from a small pea to a nut, raising the peritoneal covering and possessed the shape common to this period after delivery. It was six inches long, five broad, and two pounds seven ounces in weight. On making a longitudinal section, its walls were one inch and three-quarters deep. The cut surface exhibited sections of several small fibrous tumours. A tumour about the size of a pullet's egg projected into the cavity from the posterior part of the fundus, and was so lightly connected with the parts as to be turned out with tolerable facility; we could not, however, distinctly recognise its encysted structure. Both ovaria were in a natural state.

Having fully described the details of this interesting case, a prominent question naturally arises in the mind, namely, Does the result justify the opinion we came to, not to interfere by puncturing the membranes, or, in other words, would the interests of the patient have been promoted by interference? We have already seen that in despite of the mechanical obstruction in the pelvis, and the apparent want of space, the fœtus was expelled by the pains. It is sufficiently difficult to estimate the precise diameter of a pelvis distorted by ordinary causes which will admit of the delivery of the cranium in its mutilated state, because so very much must always depend on the bulk of the cranium itself, and this information can never be acquired prior to delivery. One inch and three-eighths are said to be adequate for the purpose; indeed, my friend Dr. F. Ramsbotham speaks confidently upon the point. But it is taken for granted that there must be sufficient room in other parts of the pelvis, and especially at the outlet, for the introduction of instruments. Such was not the case here. I have already said there was available space only for a finger to be introduced. An infinitely greater doubt must necessarily exist when the pelvis is occupied by a tumour apparently solid. The dimensions of a pelvis deformed by osseous disease are not capable of increase (unless, indeed, mollities ossium in its worst form be progressing at the moment). But it is otherwise when the obstruction is occasioned by a tumour, however solid it may be, into whose texture bone does not largely enter. Its actual compressibility cannot be determined *à priori*, and the practitioner can only act on the general principles of science.

I take it for granted that the inflammation and softening of the large tumour, considering its extent, would have gone on to the destruction of life. In a far less complex form of the same fibrous disease, unaccompanied by pregnancy, the inflammation occasioned the patient's death in about a fortnight. I do not mean to say that the process of softening necessarily occurs. In the fine specimen of fibrous tumour here exhibited, taken from a lady who died a few days after delivery, from acute peritonitis, you perceive no traces whatever of such a change, neither did this change occur, in any material degree, at least, in Dr. Montgomery's case of fibrous tumour, two or three small cells only being found in its interior, and yet its bulk and connections were such as to call for delivery by means of the Cæsarean section. Neither do I suppose that the softening from inflammation is *necessarily* a malignant change, having repeatedly witnessed the recovery of patients after severe attacks of inflammation of fibrous growths during pregnancy, and it is reasonable to suppose softening must have taken place more or less. Whether the pultaceous parts of the tumour ever become absorbed I am unable to say. We can only form a rational conjecture. In speaking of the ramollissement of a fibrous tumour it is scarcely necessary to observe that I do not allude to

a suppurative action. Suppuration in fibrous tumours is a very rare occurrence. I have met with only two or three such instances. Our impression that the course we adopted was the proper one rests on the following points:—

First. As the violent and long-continued action of the womb, lasting at least a week, was inadequate for the dilatation of the cervix at an earlier period, aided by the best provision of nature, the membranes and the volume of waters which they contained, it cannot be supposed that the difficulty could have been overcome in a safer manner by the unprotected fœtal head. And,

Secondly, The condition of the large tumour seems to authorise the idea that the change in its interior, considering its extent, would have been inconsistent with the preservation of life.

The examination of the specimens here presented to you in connection with their respective histories will go very far to establish the validity of this opinion. In the one specimen the fibrous tumour, the size of the fist, which projected into the cavity of the uterus, occasioned the patient's death a fortnight after delivery. In the other a similarly sized tumour, projecting from the cervix uteri, and in a similarly softened state, occasioned a like fatal result only a few days after the delivery of the mutilated child's head.

We have seen, however, that after a very long process of suffering, embracing a period of at least six days, the fœtus was expelled by the unassisted powers, and although it had ceased to live for three preceding days, it was very evident that in passing through the cervix of the womb the small cranium, softened by the changes after death, had sustained a violent compression. Considering, therefore, the complexities of this case, and the extent of disease which it presented, it is our conviction that all human means would have been unavailing; consequently it is matter of congratulation rather than regret that our proceedings were mainly of the passive kind. Still, as we have no means of ascertaining during life the extent of the changes in the interior of the tumour; in other words, whether the disorganisation may not be compatible with the patient's recovery, I should not regard this case as justifying a passive treatment in another. It is, in fact, impossible to lay down the rule of practice absolutely, for very slight variations may justify a modification in treatment. On the general principle that nothing short of the evacuation of the womb can afford a chance of recovery under the circumstances of a case like this, I think, if a similar instance presented itself, I should attempt the discharge of the liquor amnii. A long and curved instrument would be necessary for the purpose. Supposing the attempt to succeed some little room would probably be gained, and an effort might be made at that particular moment to raise the tumour. Supposing the tumour could neither be displaced nor diminished in bulk by puncture, I should be content in having done according to the best of my imperfect judgment, and in leaving the issue to a merciful Providence.

Several Cases more or less analogous to the foregoing

have already been placed on record; I have elsewhere quoted* a case of labour in which a tumour which proceeded from the posterior part of the cervix uteri, filled the pelvic cavity, but at length a portion of the fœtal head was touched; at this juncture, and after the Cæsarean operation had been fully resolved upon by four practitioners, the tumour was pushed up, the head descended, and the child was delivered alive.

In a case related by Dr. Ashwell† the woman died after artificial delivery from placental presentation at the eighth month. On examination of the uterus "there were found on its anterior surface tubercles of semi-cartilaginous hardness, two as large as cob-nuts, and there were two others as large as oranges embedded in the substance of the organ."

A most interesting and important case of pregnancy, complicated with a tumour, occupying nearly the whole pelvis, has been recorded by Dr. Beatty.‡ It was a first pregnancy, and the patient had reached the eighth month when Dr. Beatty was consulted. The uterus was distended to the degree common to this period of pregnancy, and a hard round tumour projected from the right of the fundus, about the size of a large orange; a similar growth existed at the opposite side of the uterus, and the whole fundus had an irregular knobbed feel, and in addition to these a tumour, about the size of a tennis-ball, was perceived high up in the right side, under the ribs. Regarding these as the common fibrous tumour of the uterus, Dr. Beatty proceeded to examine per vaginam, when (he says) "to my very great consternation I found the entire pelvis blocked up by an enormous dense mass of uniform great density." It reached within an inch of the vaginal orifice, almost resting on the perineum, and the point of the finger could barely be passed between the tumour (which lay between the vagina and rectum, free from any adhesions) and the symphysis pubis. It was impracticable to feel the uterine orifice, and the higher the finger passed the wider the tumour expanded. Although at first it seemed immoveable, it

* Obstetric Medicine, p. 136.

† Guy's Hospital Reports, No. ii., p. 316.

‡ Dublin Journal of Medical Science, No. 51, vol. xvii., p. 411.

was found subsequently to yield a little to steady pressure upwards, and as no portion of the mass could be detected at either inguinal region, it was plain that if the mass extended into the abdomen it must lie behind the uterus; but from the circumstance of the abdomen not being more than usually prominent, Dr. Beatty was inclined to think that the morbid growth did not reach higher than the back of the cervix uteri. The fœtal heart was audible high up on the left side, near the umbilicus, and from this circumstance it was almost certain that the fœtus was placed with the breech downwards.

On a consultation it was held as extremely probable that delivery could only be accomplished by the Cæsarean section. Full preparations were made for it. After a continuance of six or eight hours' labour-pains, the os uteri could be distinguished, and the tumour, which had gradually risen, ultimately receded so much as to leave the lower half of the pelvis free, and thus enabled Dr. B. to pass his hand into the vagina. He observes,—"The pains continued to increase in strength, and, getting my knuckles applied to the tumour in the direction of the axis of the brim of the pelvis, I was gratified to find that as I pressed the tumour sensibly was elevated, and the membranes advanced more and more into the vagina. The breech of the child was found to present. The difficulty arose in the delivery from the limited space left free at the brim of the pelvis, about the anterior half, being the entire portion not occupied by the base of the great tumour. The breech was brought down by means of the blunt hook, by steady traction, exerted for about half an hour, being thirty-nine hours after the accession of labour. As might be expected the child was dead, although the head was got past the tumour unmutilated."

After making some pertinent remarks on the structure, size, and attachments of the tumour and on the axis of the uterus, prior to labour coming on (the os being placed above the symphysis pubis instead of being in the middle or posterior part of the brim), he goes on to remark, that "before the contents of the uterus could be expelled the obliquity of the organ must necessarily be rectified. This was in a great measure accomplished by the gradual retraction of the posterior portion of the neck, and the shortening of the long diameter of the whole organ by the contraction of the longitudinal fibres." The effect of this would be to draw the tumour along with it, and thus elevate it out of its position in the pelvis. I have stated the substance of this highly creditable and instructive case very much in Dr. Beatty's own words.

A case of abdominal tumour complicated with pregnancy, in which the Cæsarean operation was rendered necessary, has been published by my friend Dr. Montgomery.* In many respects the case resembles the one under our present consideration. An immense tumour occupied almost the whole of the right half of the abdominal cavity, ascended as high as the ribs on that side, and dipped down into the cul-de-sac, behind the vagina, so low as to be within an inch of the external parts. It proved to be a fibrous tumour, growing from the substance of the uterus, on its posterior and right side, and covered with the peritoneum. It completely occupied the cavity of the pelvis, the os uteri being totally inaccessible. Death occurred twenty-one hours and a half after the operation, and the parts removed from the body weighed ten pounds. Dr. Montgomery remarks that he once had a patient affected with fibrous tumour of the uterus which weighed thirty-two pounds.

CURE OF CRONIC GLANDERS IN THE HUMAN SUBJECT.

We noticed in the last volume of The Lancet, p. 753, a case of glanders in the human subject, cured mainly by the employment of tonics, and another (ante p. 312) that was temporarily checked by the use of iodine. A third case, also cured, has been lately reported as occurring in a youth nineteen years of age, who entered, under the care of M. Monneret, at the Hôpital de la Charité in Paris, on October 18, 1841, with pains in the joints and muscles of the lower extremities, though unattended with redness or swelling. Pulse quick, thirst intense, cephalalgia, and prostration present; and at night much febrile disturbance. On the 25th some pustules appeared about the left knee, and over the outer toes of the left foot; in a few days afterwards a diffused and fluctuating tumour in the left thigh, and similar tumours in the calf of the right leg successively became obvious, and some pus began to be discharged from various points. Meanwhile, as the abscesses became developed, the general condition of the patient improved; the febrile paroxysm diminished in violence; the appetite was good, and neither the nasal nor the respiratory passages appeared to be at all affected. The treatment which was now adopted was tonic, consisting of the employment of decoction and extract of cinchona, with wine, &c.

The abscesses, several of which were artificially opened, were all situated upon the extremities, chiefly the lower; most of them presented neither redness nor heat, nor any other phlegmonous characters. They continued successively to appear, discharge, and dry up; emaciation being the only perceptible effect of their repeated occurrence, notwithstanding that a horse inocu-

* See Dublin Journal of Medical and Chemical Science, vol. vi., No. 18, p. 418.

lated with matter from one of them died in five days afterwards. In June, 1842, M. Andral prescribed iodine in a solution of iodide of potassium. This medicine was taken till the 5th of July, when the patient took cold. Œdema supervened in the limbs, erysipelas in the arm, and a miliary eruption over all the rest of the body. Much fever, with delirium, &c., followed; but on the subsidence of this, the patient was clearly in progress towards recovery, and on the 31st of July he left the hospital cured, a result which may be fairly attributed to the administration of the iodine.—*L'Experience*, May 4.

DEATH FROM COLCHICUM.

A MAN, fifty-two years of age, took one night in mistake for a ptisan a decoction, in making which a large tablespoonful of colchicum seeds had been used. In three-quarters of an hour much painful disturbance of the bowels ensued, followed by profuse evacuations alternating with vomitings. Next day these disturbances had ended, and the patient, though weakened, manifested no alarming symptom. The stomach, however, contracted spasmodically on application of the hand to the epigastrium; the pulse was weak and accelerated; and the stools were liquid, interspersed with many white pellicles, and exhaled a very fetid odour. Warm water and butter were given, and promoted a return of vomiting and purging; strong coffee, and decoction of marsh-mallow root with lemon-juice were next administered, the practitioner supposing that all the poison had now been eliminated from the system. But on the ensuing day respiration was hurried and sighing, the voice hoarse, the face pale, eyes sunken, and pupils much dilated, forehead painful, tongue furred, epigastric region painful, extremities cold, pulse frequent, and almost imperceptible, no thirst, the stools containing thickish coloured matters. The intellectual faculties became deadened, and paralysis and death ensued. After death, all the muscles were found very rigid and injected. Inflammation was perceptible at the bifurcation of the bronchi, but not in the lungs, which organs were pale, and pasty to the touch. Little fluid was found in the pericardium, but the heart contained a great deal of coagulated blood, and large dark-coloured spots were seen on many parts of its surface. The œsophagus below the diaphragm and the mucous membrane of the stomach were of a darkened purple colour, and the gastric and mesenteric veins, gorged with blood. Brownish-red spots, were visible in many places throughout the jejunum and large intestines.—*Wurtemb. Corresp. Blatt.*

SUGGESTIONS FOR THE PREVENTION OF HEREDITARY DISEASES.

By HORATIO PRATER, Esq., London.

"Principiis, obsta: sero medicina paratur
Cum mala per longas invaluere moras."

"Prevention is better than cure."

"To give birth to those
Who can but suffer many years and die,
Methinks is merely propagating death
And multiplying murder."

Scrofula, when it attacks the bones, becomes, in some respects, even more formidable than other hereditary diseases; and, as it is by far the most common, merits especial notice. Origin and mode of transmission of hereditary diseases. At present the cure of them seems to be beyond the power of medicine; to effect this the structure of every part of the body must, probably, be changed; hence it would seem that whatever plan of treatment is adopted must be long persisted in. The importance, therefore, of preventing them; general rules for effecting that object. Advantages of and objections to these rules.

THE subject of the following discourse seems to be one of the most important that can engage attention. The maxim that "to prevent is better than to cure" is almost of universal application. It extends from morals and legislation to medicine, and is applicable to crime as well as to diseases. But if it be better to prevent when we *can* cure, how much better still must it be to prevent when we *cannot* cure. Now the diseases about to be noticed, strictly and logically speaking, admit only of palliation. Their radical and decided cure seems at present beyond the power of medicine. This fact may, it is hoped, justify the observations that will be found with regard to the expediency of legal interference for enforcing general attention to the subject.

Among the most fearful hereditary diseases that are incident to humanity are scrofula, cancer, epilepsy, and insanity. Of these, as scrofula is by far the most common, so it is often, but happily, indeed, not always, the most to be dreaded in its consequences; it is the only one among them that affects the bones, and, consequently, the only one of them which makes a cripple for life of its unfortunate object. When seated in the spine or the hip-joint it becomes almost as formidable as cancer or insanity. In the former case the disease may sometimes be completely removed by the knife; in the latter the unfortunate individual, though always a fit object of compassion for his friends, is still not unfrequently happy within himself. He, too, may, moreover,

equally as the subject of cancer, be restored, after a certain interval, to a more or less perfect state of health, and be in a condition to enjoy his liberty. Not so those scrofulous individuals in whose system the disease has penetrated to the bones. Even if they survive their affliction they must too generally remain crippled, and liberty to such individuals is in a great measure a word without meaning.

We shall consider scrofula more particularly—First, because it is far more common than cancer; and, secondly, because it is likewise much more capable of alleviation or eradication than this disorder. At the same time much of what we have to say on the means of preventing the transmission of scrofula from parent to child, will apply to cancer, and indeed to all hereditary diseases. We may consider hereafter the peculiarities of treatment which the disposition to cancer, gout, &c., seem individually to require.

As an introduction to the practical details of this discourse, I propose to make a few remarks on the origin and mode of transmission of hereditary diseases in general.

From physiological researches on the nature of the changes that take place during incubation, it seems now to be pretty accurately ascertained that the blood of the young chicken is formed before the vessels that are hereafter to contain it. The same, therefore, probably takes place in the human subject; but however this may be, we are certain that when the blood has once fairly began to circulate, it is the source from which every part of the body is derived. The food taken in by the stomach is soon converted into chyle, a necessary step to its conversion into blood. The blood once formed circulates to every part of the system, and, as in the fœtus *before* birth, it has given origin to the brain, every muscle, nerve, and even every bone; so *after* birth, every moment of our lives, it is nourishing or repairing these same parts. No mechanic has yet been skilful enough to invent an instrument or machine that can repair itself in case of accident; but the living machine (if we may so call it) does this, and does it by the agency of the blood. Let even a bone be fractured,—solid matter, as we well know, is deposited by this vital fluid (properly so called) at the very time and place where it is wanted. A physiological fact this, indeed, that (taken in conjunction with others of a similar nature) might almost incline us to doubt whether instinct, a modified species of intelligence,—in fact, *all* the properties of the life of the animal, of which, as we have seen, it is at once the origin and support, do not reside in the blood. In common with some others I have considered the blood to be alive, and have endeavoured, as I conceive, to attach more definite ideas than had previously been done to such an opinion.* It is a question for future inquirers to determine (and much may be accomplished by analogical reasoning when observation and experiment fail) whether instinct or modified intelligence is not, in all probability, to be superadded to life.

But to return from this digression. With the knowledge that the blood is alive, and that by it the body is both formed and nourished, we can have but little difficulty in understanding, first, how by the agency of this important fluid hereditary diseases are transmitted, and, secondly, how, in all probability, diseases become hereditary. I need not endeavour to elucidate further the first of these positions. It will not be denied by any *physiologist* that it is by the blood that disease is rendered capable of transmission—the blood while partaking of the life of the body partakes likewise of the diseases of the body.

Now, as to the second point proposed for consideration, viz., in what exact way diseases become hereditary, there is more room for difference of opinion. It will, however, doubtless, be generally admitted that in such diseases some deep-seated and decided change in the composition and constitution of the particles of blood has taken place. What this change may be we can only conjecture; but the most rational conjecture appears to us to be that it consists in a permanent alteration in the very structure of the globules. The globules of blood, which are now well ascertained to have a determinate form equally as the body of the animal in which they are to circulate, being moulded in a diseased structure have, necessarily, the impress of disease blended into their most intimate constitution. Let us take the case of scrofula, for example. Among the principal primary causes of this disease, in those not inheriting any predisposition to it from their parents, may certainly be reckoned impure air and diet and deficient exercise. But leaving this subject for the present, let us conceive the disease to have established itself. It has then, as a consequence, affected more or less the structure of almost every part of the body, since we know that it often requires but a very slight exciting cause to make even the bones themselves manifest clearly that tendency to disease which has often for years been lurking concealed within them. A slight blow, or a fall, which in a healthy individual would not have left a trace behind, produces often, in the scrofulous subject, a state of disease that baffles all the skill of all the most successful practitioners. Although fresh portions of food continue to be taken in by the person affected with such a disposition to disease

* Prater on the Blood, Highley, Fleet-street.

as that in question, the blood which is formed from this food must, even year after year, be formed in a diseased state. Instead of a long succession of fresh portions of healthy food gradually eradicating the disease from the system, by supplying materials for a new and healthy structure, it is too commonly the case that they rather serve to support the life of the fabric in the same diseased condition. And in this way is it almost demonstrated that the vessels can, not only by contact impart life to the blood* (as has been shown by Hewson, Cooper, and Thackrah), but, also, that they at the same time can impart to it all the peculiar diseased or healthy qualities of the animal in which they exist. Thus, in the scrofulous subject, when life is imparted to the blood by the vessels in which it circulates, the tendency to the scrofulous state—*a peculiar quality of the life of such an individual*—is imparted to it at the same time. But this scrofulous blood (if we may so speak) goes to deposit itself in a solid state in every tissue of the body, not even excepting that of the bones themselves. Therefore it is easy to perceive how, by means of the blood,—the blood as a living fluid—the blood as susceptible of impressions like living matter in general,—many of the most terrible forms of disease get that strong hold of the constitution as to continue in it, either in a latent or ostensible form, for the life of the individual, whatever system be adopted to eradicate them. Accordingly we find, in support of the truth of this assertion, that hitherto, for the *cure* of the most decided hereditary diseases (scrofula, cancer, fungus hæmatodes, insanity, and epilepsy), no specific has been found. Nay, we may go further, and assert that neither has any plan of life, diet, or regimen, been suggested, however irksome to the patient, however long persisted in, that could be considered as more than palliative. Subdued for a time, the disease might have been considered cured. But even if it should not again, after adopting certain measures, have affected the patient during the course of life, we should only be inclined to admit that by some fortunate accident he was not exposed to those various circumstances which tend to call it into action. Had he married, even years after his reputed cure, we should have little hesitation in considering that the offspring would still have been liable to the affection of a parent so circumstanced; and *that* cannot be said to be eradicated or cured which is still capable of transmission. In truth, the most superficial, as well as the most profound, reflection on what has been said, will alike induce us to despair of ever finding a specific for the cure of the hereditary diseases now generally under consideration. If, as we conceive, they alter more or less the structure, *even before they become obvious to the senses as diseases*, no medicine or system of diet will avail to cure them but what can, in like manner, change the structure of every part, and bring it back to the exact conformation of perfect health. Now, it has been computed by physiologists that the human body, *including the skeleton*, is taken down and rebuilt about every seven years. I need scarcely stay to observe that it is rebuilding even while it is being taken down, and that the processes of destruction and renovation, absorption and nutrition, take place in a like period of time; for, otherwise, of course we could not preserve the identity we appear to do. Still less need I stay to expatiate on this beautiful peculiarity of the living power, which gives it a superiority that art has not hitherto been able to imitate; art, *which not yet having discovered how to operate on the individual atoms of matter*, cannot rebuild during the process of destruction. Let us resume, therefore, by observing that since, as was lately stated, the human body is completely changed every seven, or, at furthest, every ten years, it does not seem very probable that any plan of treatment pursued for a period far short of

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* The course of the blood may be considered a circle, at least as regards its returning to the same point from which it started. So it is with life itself. Old age is second childhood. "From dust, we sprung; to dust we must return." Animals live on vegetables, or on each other; but animals die, and then, in their turn, nourish the earth and contribute to the support of vegetables. In consequence of this *circular* movement (if we may so call it) of nature, the earth seems neither to increase nor diminish in size. We may add that the earth itself is nearly circular, and moves nearly in a circle. The ancient philosophers were so fond of praising the perfection of this figure, that some of them, if we remember a-right, consider it must be the form of the Deity and divine beings. And, perhaps, they were partly led from this idea to consider the earth itself, the sun, moon, and the stars, as animated beings. Such, at all events, was the general belief of the heathen philosophers. There is no termination to a circle, and it may be asked is the form of the earth and heavenly bodies emblematic of their duration? Are they to last for ever? But to the immediate object of this note. When the animal is full-grown the vessels seem to communicate life to the blood. Before the animal is born (if it be true that the blood is first formed) this, in all probability, communicates life to the vessels. If such view of the subject be correct, we have another circle. The circle, again, must be completed for us to obtain voltaic electricity, which has been called "circular chemical action."

this* can be expected completely to subdue hereditary diseases, which, by their very nature, seem *necessarily* to affect the structure of the whole body. But as we have already found it probable that all hereditary diseases do affect the structure of the whole body, do change it more or less from the condition of health, we come to the conclusion that any system of diet or medicine recommended for the *cure*—the perfect and absolute *cure*—of such affections, should, in all probability, be persisted in for some years. Now few individuals could bear this restraint, and few, perhaps, of those who *could* would be inclined by the prospect of a doubtful issue to subject themselves to so much inconvenience. Accordingly, it seems far from improbable that as the worst forms of hereditary disease have hitherto baffled all the efforts of art, they will, in the majority of cases, still con-

* The grand distinction between hereditary and non-hereditary diseases seems to be that the former alter the structure *deeply and permanently*, even to the globules of blood, while the latter affect every part that becomes affected by them *superficially*. Thus, in the case of the fluid just mentioned, the only probable alteration sustained by it is some change in the *relative proportion* of its saline or watery particles; while, by the action of hereditary diseases, its globules are probably *formed* differently (though, of course, the difference must be of too refined a nature ever to be discovered by the microscope) from those present in a state of perfect health. This view of the subject may be right or wrong; but it explains well how fevers and other contagious diseases are often readily cured by exciting perspiration, or the secretions generally,—a mode of treatment, it is to be observed, well calculated to throw any noxious matter *loosely* floating in the blood out of the system. In the cure of hereditary disease the case is different. For the worst forms of such diseases we know of nothing more than *palliatives;* but, although, as stated in the text, it seems probable that no plan of treatment will effect a *cure* in these which is not persisted in for some years, there are facts which appear not to support such a conclusion. The facts alluded to are, first, that of vaccination, or, indeed, inoculation by the small-pox itself, preventing the occurrence of this disease in the same individual, *subsequently, for life*. Secondly, that many diseases only attack once during life. Although these facts are placed separately, they appear in reality to be the same, if, at least, we consider the vaccine disease in truth but a modified species of small-pox, an opinion which has been entertained. And if, indeed, we do not, it seems doubtful whether in point of fact the two objections are not identical. In both cases it is the incapability of the disease to occur more than once during life, as we shall see presently, that is the apparent objection to the theory of the text; and it matters little whether we conceive that the same disease prevents the same, or whether it is a different one that has this effect. Considering, therefore, the two propositions just stated as capable of being considered under one head, the objection they appear to offer to the conclusion that for the cure of hereditary diseases the treatment must be persisted in for some years is, that in such cases, whatever the change produced may be, it continues for life, *though it must have been effected during the short course of the diseases in question*, all of which occurring only once during existence, terminate in less even than a year. In this *short space of time*, then, they must have produced an alteration in the structure or life of the body, that lasts, notwithstanding the complete change it undergoes in the course of every seven years, for the life of the individual. Why, then, it may be said, even admitting in case of hereditary diseases that the structure is *altogether* somewhat different from a state of health, must it be necessary that treatment should be continued for years; seeing, that in the cases just mentioned, the structure or mode of vitality is changed permanently even in the course of a few months, or even a few weeks? The objection that may be urged against the conclusion to which this mode of reasoning would lead is, that the class of diseases that occur only once during life are of a totally different character from hereditary diseases, strictly so called; and, consequently, it may be doubtful whether a conclusion different from that of the text should be drawn from this singular property of such diseases. As, moreover, hereditary affections are not, generally speaking, even *palliated* except by a *long* course of medicine, or *long* confinement to a peculiar diet, the objection just considered is probably not applicable. However, whether it be or not, must be decided by future experience, and it was thought as well at least to mention it. Since measles and hooping-cough seem almost *incapable of occurring except in infancy*, the objection which was the occasion of this note is chiefly, if not altogether, applicable to small-pox and scarlet fever. How exactly the new body (if we may so speak) deposited every seven years resembles in *every* peculiarity the old, may, perhaps, be surely inferred from the fact of the impression of small-pox or scarlet fever lasting for life, as well, indeed, as from the tendency to hereditary disease born with an individual never leaving him perhaps *altogether* till death. However true, therefore, in point of fact it may be that the body suffers the change just stated every seven years, it should not be forgetten that the *real* change is still very trifling.

tinue to do so. It is to be hoped, however, future discoveries will show that this is taking an erroneous view of the subject, and that as splendid triumphs as those achieved by modern chemistry are yet destined to perfect and elevate the pursuit of philosophical medicine. At present, however, it seems obvious, if the above mode of viewing the nature of hereditary diseases be correct, that we should rather seek their *cure* in the effects of *diet* and *climate* than in the administration of any articles of the materia medica. These are agencies that may often be tried for years by the sufferer without much inconvenience and restraint, and without injury to the constitution, recommendations which are far from being universally applicable to physic, since it is a singular fact that almost all our most efficacious remedies are poisons. They, therefore, never should be used when any substitutes can be found, more especially when, as in the cases under consideration, there is reason to believe they must be used *for a very long period* to be at all effectual.

It is time now to turn from considerations on the *cure* to considerations on the *prevention* of hereditary diseases. Fortunately for the objects of this discourse, the best mode of acting in each of these cases presents a somewhat different point for investigation; and it is with the one by far the more easily ascertained and elucidated that we are now principally concerned. In the first place, it is obvious that we may often be able to prevent diseases that we cannot cure; and secondly, that our mode of accomplishing the former object will often be necessarily different from that required for the attainment of the latter. This remark, indeed, is particularly applicable to *hereditary* diseases, as will be seen by the general plans proposed for the prevention of such diseases, which are now soon to be stated. I find, on bringing them forward, I cannot lay claim to so much originality on the subject as I had previously expected; but although the principal one of them, viz., the entire separation of the child from its mother immediately after birth, in case the hereditary disease exists on her side, is mentioned in the works of Pemberton* and Baudelocque†, and also in that of Dr. Clarke‡, just published, still the subject, even by these well-known authors, seems not to have been examined in all its bearings, while to the public at large—the public, whom it principally concerns—it has scarcely ever, perhaps, been the object of a single reflection. To these reasons for continuing the prosecution of it, after I had found myself in a great measure anticipated by the authors just alluded to, I may be allowed to add (while passing over in silence, at present, some opinions on the best mode of effecting the object in view which appear peculiarly my own) that, as writers on scrofula, they have confined themselves, in recommending the plans now to be mentioned, to the consideration solely of that disease, while the more general object of this discourse enables me to extend them to *all* hereditary diseases. Assured, as I must be, of their efficacy in preventing or mitigating scrofula, I cannot but have equal or still greater confidence in them in cases of madness. Scrofula, like other hereditary diseases, affects the *body*, and if such diseases are to be prevented, the plan adopted should certainly be put in practice early; but to diseases of the *mind* this maxim, if possible, seems of still more satisfactory application. At all events it may be with safety concluded, if the attempts to prevent madness are unsuccessful while the body predisposed to it by parental influence is *only forming*, that it is in vain we seek for remedies when the disease has once manifested itself; but hereditary diseases affecting the *body* admit, at all events, of *palliation* by medicine. It seems peculiarly incumbent on those in whose families this terrible affliction exists to attend to the following

Plans for Preventing the Transmission of Hereditary Diseases from Parent to Child.

1. Let those on whose side the taint exists, adopt for some years (or, at all events, for a year) previous to marriage a diet and plan of life, which has been found by general experience most conducive to the palliation of the disease under which they are labouring.

2. As a part of the same system, let them, if their circumstances permit, even remove to a climate where the affection which they wish to subdue is rare, or unknown; and if they cannot continue there during life, let them, at all events, remain there for a period of six or eight years.

3. After marriage, if the hereditary taint be on the male side, the mother may suckle her children herself, living, as we are now supposing, with them, in a climate very unfavourable to the growth of the disease; or, at ell events, bringing them up by a system of diet and regimen (aided by medicine if proper) calculated to subdue it.

4. If the disease be on the mother's side, she is, of course, for some years previous to marriage, to live in a manner the best calculated to eradicate it; and if, indeed, this be impracticable, she ought particularly to do so during the whole time of pregnancy. In case of issue, the child as soon as possible is to be separated from her as *far as nourishment, &c., is concerned*, and to be brought up either by the hand or a wet nurse (of which the former is preferable), that it may not derive a further disposition to disease from her milk; for this, although not possessing a

* On the Abdominal Viscera. London.
† On Scrofula. Paris, 1834.
‡ On Consumption. London, 1835.

direct power of communicating the disease, still, as a nutritive fluid, has, in all probability, that defect in composition or structure (for milk is *globular*) common to the solids, on which hereditary diseases seem mainly to depend. Since, moreover, the other secretions of the mother may partake of the same diseased disposition as the milk, it should be a general rule that the child, although, of course, it may be allowed to remain in her house or apartment, should not be kept for any long period in very intimate contact with her.

Such is an outline of the general plan to be pursued for the eradication of hereditary disease. The details must *in some degree* be filled up by future inquiries; for it may yet be matter of opinion what plan of life or what climate is, in individual diseases, the best calculated to promote the object in question. We shall enter into the consideration of this subject at length at a future period.

It is now proposed to state the reasons on which the leading plans just stated for the prevention of hereditary diseases,—viz., 1st, the preference given to bringing the child up by the hand to a wet nurse; and 2nd, the recommendation of the parent on whose side the disposition to disease exists to adopt preventive measures *previously* to marriage, —are founded.

The advantages that attach to bringing the child up by the hand instead of employing a wet nurse, are, the difficulty of ascertaining that the nurse herself is free from the disposition to hereditary disease, which it is our object to endeavour to prevent in the child. The nurse interested in endeavouring to obtain employment, will probably on most occasions studiously conceal any disposition of this sort that may exist in her family; and thus it is possible that the child may gain no advantage whatever by relinquishing the breast of its mother for that of a stranger. Nay, it may possibly derive positive injury by the change, since the disease of the nurse or her family may be of a more malignant character than that of the mother. Moreover, as scrofula is so common among all classes of the community, if this be the affection for which the child is separated from its parent, the chances perhaps are, that the nurse to whose care it is entrusted is not altogether free from the complaint.

These are considerations that will apply to *all* classes of the community. But the extra expense of a nurse of the description in question, would, with many, necessarily be an additional objection to her employment.

It has been said that children brought up by the hand are not so strong and healthy as others reared in the usual way. But this question is only to be decided by an appeal to facts. Some of the strongest and most healthy children I have known have been so brought up, even from the period of birth. The illness of the mothers of *poor* children after their confinement is constantly obliging them to support the life of their children in this artificial way. Numbers, then, are brought up so, and numbers of the most healthy part of the community. The objection of its not being *natural* is scarcely worthy of notice: custom is more natural to us all, perhaps, than nature. At all events, as Plutarch says in his Morals, we feel more what is against custom than what is against nature.

We now proceed to notice the other plan singled out for further comment, viz., that the parent on whose side the disease to be prevented exists should for some years (or, at all events, a year) *previous* to marriage adopt measures calculated to effect the object in view.

This recommendation is founded on the fact that Chaussier, Husson, Billiard,* and Langstaff,† have found tubercles in the lungs of the *fœtus* and still-born children of scrofulous parents. It appears, therefore, in these cases, that the disease of the parent was communicated to the child even while the latter *was forming*, and consequently before it could have derived such disposition from the properties of the milk. As analogy would lead us to believe that this observation is applicable to other hereditary diseases, it has served as the foundation for recommending the adoption of the general preventive measures in all of them, for *at least* a year previous to marriage. At the same time it is right to observe, that the occurrence of the scrofulous disease of the parents in the child *before* birth is extremely rare; since Velpeau and Breschet, in their extensive dissections never once discovered scrofula in the fœtus; nor did Guizot, out of four hundred children which he examined. The researches of the French pathologists lead to the belief that it is not *generally* till the age of two or above that scrofulous tubercles begin to form. M. Guersent conceives that at the Hôpital des Enfans Malades, where none are admitted below the age of one, nor above that of sixteen, that two-thirds or even five-sixths of those examined after death, were tuberculous; and according to M. Lombard, of Geneva, tubercles are not found in above one-eighth of the children who die at the hospital there, between the ages *of one and two*.‡ Now, of all hereditary diseases scrofula is, perhaps, the most prone to make its attack the earliest; so that if we could be sure that the disease did not exist before its began thus openly to manifest itself, there would be little reason in any case for taking precautionary measures previous to the birth of the child. But the fact is,—whether the disease, as in the case of scrofula, is most

* Clarke on Consumption.

† Lloyd on Scrofula, and Med. Chir. Transactions.

‡ Clarke, op. cit., pp. 173, 175.

prone to attack infancy; or whether, as in those of gout, mania, and cancer—advanced age—that the *disposition* must in every instance be in a great degree communicated during the formation of the child in the womb, though, perhaps, in some measure during the subsequent period of nursing. The time when this disposition *shows itself*, the causes of which will be considered hereafter, can have nothing to do with its *original formation*; or, indeed, if it has, the whole subject may be considered at present as unintelligible. But as there is no necessity for making a difficulty where none exists, it is correct reasoning to presume that in *all* hereditary diseases the *disposition* to them is produced while the fœtus itself is forming. Now we shall show hereafter that it is only in *disposition* that the malignant diseases in question can be called hereditary. It follows, then, as a necessary conclusion, that whatever preventive measures may be found best calculated to subdue the different hereditary diseases, ought to be put in practice at least a year *previous* to marriage. After these observations, it is scarcely necessary to say, should the tendency to the hereditary disease exist on the part of the female, that during the *whole* time of her pregnancy it becomes her still more rigidly, if possible, to observe the measures proposed for securing the immunity of her offspring, a suggestion, indeed, for which the public are indebted to Dr. Clarke.

(To be concluded.)

PATHOLOGY OF TETANUS.

At the autopsy of a patient who died in the Hôtel Dieu of Paris, with tetanus supervening on fracture of the leg, numerous ecchymoses were found on the fibrous sheath of the spinal cord; and external to that membrane a collection of black and liquid blood occupied the lower part of the vertebral canal to the height of five or six inches. The spinal cord itself was softened throughout its lower two-thirds, and closely adherent to its pia mater; and the ramollissement continued, though in a less degree, to the occipital foramen, terminating just below the corpora pyramidalia. Within the cranium the pia mater was observed to be greatly injected, and there was extensive softening of the left anterior and middle lobes of the brain. In the sciatic nerve of the right side (the side of the fracture) ecchymosis and inflammation were perceptible, but there was neither in the nerve of the opposite side. (It should be stated that the autopsy was not made until fifty hours after death.) Numerous other cases are cited, in which softening of the nervous organs and similar appearances have been observed; but tetanus has occurred without such having been afterwards discoverable.—*Archiv. Gen. de la Med.*, April, 1843.

ON THE

TREATMENT OF CHOLERA

AND THE

SEVERER FORMS OF FEVER.

By C. Searle, M.D., M.R.C.S.L., Bath.

I must now* revert to the severer forms of disease developed by the agency of malaria, and of its hydro-carbonised compounds on the system, of which affections we assume cholera to be the severest type. The symptoms of cholera enumerated and explained in a previous paper are the following: vomiting and purging, with general debility, under ordinary circumstances of attack, and apoplectic seizure in extreme cases; serous evacuations, arrest of the secretions of bile, urine, &c.; coldness and lividity of surface; inflammation of the stomach and bowels; cold sweat; coma; a train of symptoms strikingly characteristic of the influence of a poison upon the system, whose operation is to arrest or impede the primary function of life—capillary action. The principal indications of treatment arising out of these views of the disease are obviously to supersede the poisonous agent upon the system, or, in other words, to restore excitement to the capillaries, and to purify the blood from the presence of the poisonous cause. These indications, the following observations, the result of long experience and particular attention to the effects of mercury upon the system, lead me to say, are all to be fulfilled by this remedy; the primary operation of which I believe to be specific upon the capillary vessels, exciting them to increased action, by imparting certain qualities to the blood, probably adding to its capacity for oxygen, or otherwise increasing the affinities between the oxygen of the blood and the other elements of its composition, and thereby developing increased chemical action. Hence the general influence of mercury upon the system, its renowned deobstruent power, as well as its operation on the glandular system, in increasing all the secretions. The more obvious and immediate effect of mercury on the liver, as evinced by the operation of two or three grains of calomel almost with certainty producing a bilious evacuation, is doubtless attributable to its primary and direct influence upon the liver, to which, when absorbed from the stomach and bowels by the veins of these organs, which form the roots of the vena porta, it is first conveyed, before it enters the general current of the circulation. Its operation in exciting the capillary arteries, and thereby secretion, necessarily removes obstruction from the exhalents, and congestion from their venous terminations, and thus is exudation prevented and absorption increased; and hence the accredited action

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* See, for previous papers, pages 370, 436.

of mercury upon the absorbents in removing the various serous exudations. Its power of increasing capillary action is further evinced by the febrile commotion it excites in the system, and the buffed blood of those under its more abundant influence; effects, on the exhibition of mercury, which should be guardedly watched, as, when they arise, necessarily prohibiting its further employment, and which exhibit to us that the indications for its use in inflammation are limited to the atonic stage, and that in no case should it be given in the active condition involving the heart's excitement, save in very guarded doses, and then only in conjunction with other evacuants. But when the more active condition of inflammation has been moderated by bleeding and other evacuants, or debility has succeeded to excess of febrile excitement, its administration then supports the due action of the vessels, excites the secretions, and invigorates the heart, in common with the rest of the functions, and becomes our chief remedy; and, carried to the extent of producing ptyalism, which appears to mark its ultimate effects for good, it is of all remedies the most valuable.

In thus viewing the operation of mercury upon the system, it would appear a specific or a directly antagonist agent to the cause giving rise to this disease; and experience justifies me in saying that, of all remedies, it will prove the most useful, given in large and frequently repeated doses, commensurate with the diminished absorbing power of the stomach and susceptibility of the system to its influence. Its operation, or rather its introduction into the system, should be assisted by diminishing the congestion of the brain and vascular fulness of the stomach by small bleedings cautiously practised, when indicated, as with persons of full habit, and in others where the excretions of the bowels, which I look upon as curative efforts of the system, are not excessive; and its employment preceded by securing a clear stomach, by the agency of a stimulant emetic, as of mustard-flour, or culinary salt. And as accessory agents to the operation of the mercury and to the treatment of the disease, recourse should be had to diffusible stimulants, as ammonia, warm brandy and water, and the like; and, above all things, the inhalation of oxygen, or the nitrous oxide gas, where either of these are to be obtained; and where not, the ammoniacal gas might be cautiously tried with prospect of benefit. Stimulating saline enemata are also useful remedies, and especially so when vomiting is a troublesome symptom. Warm stimulating frictions of the skin, with sinapisms to the spine, præcordia, and extremities, are also essential auxiliaries, with especial attention that the patient preserves at all times the recumbent posture.

And thus, as in the cold stage of fever, of which the symptoms of cholera are but effects of an analogous character and a more exalted kind, we may continue these remedies in a ratio with the severity of the symptoms till excitement becomes developed, and the mercury (calomel) till the secretions of the liver, which are first green, and often spinach-like, become of fluid yellow appearance; moderating the excitement at the same time, if it becomes too exalted, by antimony, saline aperients, or castor-oil, and a cooling beverage. And, we should carefully watch and guard the organs previously congested, from gastro-enteritis, or other inflammation, which too often becomes developed, by the timely application of leeches, for which reason, and also to more perfectly purify the blood, it is in my opinion advisable to continue the mercury to the effect of inducing gentle ptyalism, and, as the influence of the mercury subsides, to administer the quinine to the extent of three or four grains per diem, till health is established.

M. Mialhe, it has recently been announced in the pages of THE LANCET, states that the action of mercury upon the system is consequent upon its becoming converted into a bichloride by the hydrochloric acid of the stomach, and proposes, therefore, a solution of the bichloride as the ordinary mode of its administration. The idea appears to me to be well deserving of attention, and especially so in the treatment of cholera, in which the secreting and absorbing powers of the stomach are so much impaired as, indeed, to be rendered often nugatory, defeating all our attempts to influence the system through the medium of this organ; to which cause I believe it to be, in a great measure, that the disease proves so often fatal, and which led me some years ago to suggest the inhalation of mercurial vapour, the lungs being the most actively absorbing surface of the whole body. M. Mialhe gives the following form for what he designates a normal solution of the bichloride of mercury, as the most favourable form for its admission into the blood, and which accordingly is recommended to trial:—

℞ *Bichloride of mercury*, five grains;
Chloride of soda;
Hydro-chlorate of ammonia, of each fifteen grains;
White of one egg;
Distilled water, one pint.

Mix the albumen and water, and filter; then dissolve the salts in the solution, and again filter. One ounce contains half a grain of bichloride.

A simple solution of the bichloride of mercury may be employed also as an embrocation to the cutaneous surface.

I have now to add, that the principles and means detailed for the treatment of cholera I believe to be equally applicable to the treatment of persons under the poisoning influ-

ence of opium, the sting of the serpent tribe, or other sedative poisons.

Having defined the principles of treatment, and detailed the practice to be pursued in the extreme cases, both of much and little disease, resulting from malarial influence, we shall now briefly remark upon the treatment of the intermediate varieties of fever previously mentioned, such as the bilious remittents of hot climates and seasons, and the typhoidal fevers of this country. The first is a compound affection of malarial influence—intermittent, based upon and modified by the blood's surcharge with carbon and hepatic congestion, and accordingly it requires a treatment modified to the exigence of the predominant symptoms; the early treatment more particularly having reference to the predisposing cause and local affection, and the succeeding to the malarial influence. Bleeding, the warm bath, and purgatives should, therefore, be early and efficiently resorted to, and followed up by calomel in moderate doses, till the secretions of the liver are pretty healthy, and the remissions of fever in consequence become more perfect, when quinine should be administered to the saturation of the system and prevention of the return of fever; abridging at the same time the pyrexial period by the cold affusion, or tepid ablution of the surface; and, during the remissions, supporting capillary action by wine and nutriment.

The quinine, in all these cases, should be given not in the light of a tonic but as an anti-febrifuge, and accordingly when the fever predominates must be early resorted to, as the surest means of preventing the development of inflammation, which is so apt to succeed in these cases; leeching, however, at the same time any organs in which pain may be complained of, and moderating the fever by sponging the surface, and the by free exhibition of a cold carbonated beverage.

In the typhoidal fevers of this country occurring among the poor, from the conjoint operation of insufficiency of nourishment, unwholesome food, impure air, cold, and too commonly depraved habits, in which description of cases the blood must be as foul as a cesspool, and all the functions of the system disordered; in cases admitting of being so variously modified, and of such diversity of character, it would be impossible to define a specific line of treatment, but in addition to mercurials, leeching, blisters, opium, and quinine, timely and judiciously employed, in accordance with the principles previously enunciated, and in reference both to the stage of disease and peculiarity of case, sponging the surface with a solution of chlorine, or, rather, perhaps, folding the patient in a sheet, moistened with a pretty strong solution of the chloride of lime, with suitable covering, to elicit perspiration or might otherwise prove an useful auxiliary.

TREATMENT OF SPINAL MENINGITIS.

To the Editor of THE LANCET.

SIR,—In looking over THE LANCET for May 27th last, my attention has been arrested by the case of spinal meningitis related by Mr. Tyte (p. 291). The length of time required to accomplish the cure, by the treatment employed, notwithstanding its severity, will furnish a sufficient excuse for the suggestion of a more speedy, certain, and, at the same time, less painful method. Had Mr. Tyte applied eight or twelve leeches over the tender part of the back, repeated them on the next day, if much tenderness on pressure remained, and afterwards used friction with croton oil until a copious crop of pustules was produced, instead of six weeks elapsing before the patient became *decidedly better*, the same happy result would probably have occurred within as many days. The functional derangement of the liver, stomach, or kidneys, which is generally present, would, of course, require to be treated at the same time (by means of decoction of aloes, carbonate of potass, &c., as the particular case might require).

I have treated about a dozen cases of this disease during the present year, and in only one have required to use calomel and opium. The patient was a man of very weak constitution; for a week the disease was supposed to be enteritis, all the symptoms of which were present. He was bled, and calomel and opium were administered, but the disease not yielding, I had a consultation with another practitioner, when great tenderness was discovered over one of the lumbar vertebræ. The patient was cupped over this part, counter-irritation was afterwards applied, the mercurial action maintained for a few days longer, and he was discharged, cured, in five weeks from the commencement of the attack. I usually find about ten days sufficient to accomplish the cure, but occasionally more is required, and sometimes recovery proceeds more rapidly.

I believe that a great proportion of these cases is not recognised by the medical attendants; and also that many cases exist, supposed to be obstinate dyspepsia, which are owing to that subacute form of the disease which is termed spinal irritation. A case of this sort occurred to me lately. The patient presented the usual symptoms of functional derangement of the liver and stomach, and during the last five months, *these symptoms* had been treated by four medical men. On placing himself under my care it was only by *very careful* examination that I discovered tenderness over one part of the lumbar spine. I cupped him, used croton-oil friction, ordered a powder composed of calomel, one grain, aloes, one grain, and calumba, eight grains, to be taken every night and morning,

and within three weeks thepatient was cured.
I am, Sir, yours truly, C.
June 26, 1843.

*** The writer has authenticated his statements privately, by forwarding his real name and address to the editor.

BLOOD-CORPUSCLES AND SPERMATOZOA OF THE CAMELIDÆ.

THE following measurements of the blood-discs of the camel (*camelus bactrianus*) are from a paper by Mr. Gulliver in the proceedings of the "Zoological Society of London," Part X., 1842, p. 191:—

Long diam.	Short diam.	Thickness.
1—3555		
1—3000	1—6000	
1—4000	1—8000	1—15,210
1—2400	1—4572	
1—3123	1—5876	

The numbers beneath the lines are averages estimated from the preceding observations, and they are all given in vulgar fractions of an English inch.

Thus, the blood-corpuscles of the camel, like those of its congeners, are elliptical. M. Mandl discovered this form in the blood-discs of the dromedary and paco, and then Mr. Gulliver showed that those of the vicugna and lama have the same shape.—See App. to Gerber's Anatomy, p. 10 and 43.

The above account of the corpuscles of the camel's blood completes the history of the blood-discs of the camelidæ. The oval form of these corpuscles is, as far as we yet know, confined to this curious ruminant family; and the anomaly is the more remarkable since Mr. Gulliver's former observations have shown that the blood-discs of the marsupial mammalia do not differ from the common type of the blood-discs of mammals generally.—See Dr. Willis's Translation of Wagner's Physiology, Part II., p. 234.

At the meeting of the Zoological Society, April 11, 1843, Mr. Gulliver read a description of the spermatozoa of the camel, confirming that which he had previously given of the spermatozoa of the dromedary (Proc. Zool. Soc., Part X., 1842, p. 101), namely, that they are of the same type as the corresponding animalcules of other mammals. Although, therefore, there is a singular correspondence of form between the blood-discs of the camelidæ and the blood-discs of the oviparous vertebrate animals, a similar resemblance is not observable in the essential elements of the semen of the animals in question.

No good can in any case be produced by allowing a second child to remain longer in the uterus than an hour after the birth of the first.—*Dr. R. Lee.*

BLOOD-CORPUSCLES OF THE STANLEY MUSK-DEER.

(From a Paper read by Mr. GULLIVER at the Zoological Society of London, May 9.)

IN a former number of this Journal we gave some measurements from Mr. Gulliver's observations of the smallest blood-corpuscles of mammals, from which it appeared that those of the Napu musk-deer (*Moschus Javanicus*, Pallas) were the most minute, and those of the ibex (*Capra Caucasica*, Guld) the next so, then known.

From this singular minuteness of the blood-discs of the Napu musk deer, their size in other nearly allied species became an interesting question. Mr. Gulliver now announces that the blood-discs of the Stanley musk-deer (*Moschus Stanleyanus*, Gray) are nearly as small as those of the Napu musk-deer.

The average diameter of the blood-discs, as given from several observations in the "Proceedings of the Zoological Society," Part X., p. 107, is as follows:—Napu musk-deer, $\frac{1}{11335}$th, ibex, $\frac{1}{7000}$th, and common goat, $\frac{1}{3368}$, of an English inch.

ONE OF THE JOB FAMILY.—A patient (we may call him so *par excellence*) whose case is detailed by M. Chenouard, in the "Gazette Medicale" of last year, seems to have proved in his own person the extent to which the *vis medicatrix naturæ* may sustain the frame under a succession of grave injuries. A man, thirty-six years of age, after having been thrown from, and kicked by his horse, suffered the passage of the wheel of a heavily laden cart over the pelvis and lower part of the vertebral column. He soon experienced symptoms of spinal arachnitis as well as retention of urine, which latter, after several fruitless attempts to pass a catheter, had to be remedied by puncture above the os pubis. But the canula left in the puncture having escaped from its place infiltration of urine into the abdomen was occasioned, and subacute peritonitis resulted. This having been made to succumb, it was found that the os ilium had been transversely fractured, for which new treatment was adopted. But very soon the attention of the surgeons was withdrawn to the state of the abdominal parietes, which, from the effect of the infiltrated urine, had fallen into a state of gangrene. All these diseases having been, strange to say, effectually combated, the patient was supposed to be nearly cured, when a violent attack of orchitis came on. At length, after sixty-six days of surgical treatment, the hero of our tale would probably have earned a right to the title which heads this article, but that he had not yet fully acquired the patience of his ancient and long enduring prototype, for he refused any more surgical care, though still troubled with a stricture in the urethra.

EARLY ATTENTION
TO
SYMPTOMS OF DISEASE IN THE YOUNG.

To the Editor of THE LANCET.

SIR,—I perceive, not without gratification, that you have considered a memorandum that I inclosed, incidentally, some time since relative to the sanatory state of my establishment here (from August, 1833, to November, 1842), worthy of notice in THE LANCET of May 22nd, among the miscellaneous intelligence for the week. Since November last there has not been any sickness worth naming among my pupils; and consequently I am thankful to say my twentieth session has almost reached its termination without a single instance of scarlatina, typhus, or acute inflammation, a lancet never yet having been used in the establishment. I am, however, still more surprised to find that, considering that the great majority of my pupils join me between the age of seven and ten years, we have never yet had a case of three of the most common diseases of childhood, measles, hooping-cough, and worms. I have done nothing more than select a healthy locality, attend to chamber warmth, ventilation, diet, dress, and exercise, with careful reference to fixed principles; and whenever I have observed slight symptoms of functional derangement, of whose character I entertained the least doubt, to call in medical aid, and act strictly according to orders. Taking into account that a great number of boys, in proportion to the total, have been placed with me for the recovery of their health,—some having been removed from other schools in an extremely delicate state, at the end of their first half-year,—I find convictions that I have long felt more and more strengthened, as to what might be accomplished, not only in families and schools, but in factories, barracks, workhouses, and prisons, were the laws of health more generally understood, and were medical science more generally put in requisition to *prevent* rather than to cure disease. Had I, with all my personal vigilance, and the advantage of a highly favourable site, followed the multitude, in *waiting a day or two, to see how things would turn out*, I should have a far different account to give. On many occasions a delay of ten or twelve hours would have led to serious consequences; and certainly, on some occasions, to even fatal results. A pilot is employed to guide vessels through dangerous straits, not to tow them off rocks and sandbanks; but the medical man is seldom called in until his patient is fairly stranded; and then, instead of commanding that obedience which the pilot claims and receives as a matter of course, too often he is opposed openly, or thwarted secretly, in every possible way; while, should the invalid not be set afloat, he must bear all the blame; and, if by doubling and trebling his assiduities, he saves his patient from the reckless mismanagement of himself and his friends, in too many instances he is charged with protracted attendance, and all the praise is bestowed where all the blame ought really to fall. I remember hearing of an Irishman once replying to his master's reprimand, that it was not worth while to mind a small hole in some part of his dress until it got bigger, and I believe that many of all ranks and degrees who would laugh at the poor Irishman's simplicity, do not act more wisely with respect to the health.—*Sed tamen amoto quæramus seria ludo.*

The evil is great; and as long as popular ignorance of the first principles of hygiene continues,—so long as prejudice and negligence array themselves on the side of disease and death,—advance in medical science can effect but little commensurate good; and the practitioner who has devoted the best years of his life, and the best energies of his intellect to the welfare of mankind, must be content to see some adroit pretender, who laughs at science, but induces his patients to act with common sense, make a fortune with pitch-pills and saffron-water, or some such universal specifics. Had a jury been assembled on occasions of which I have had cognisance, and had I been impanelled on that jury, I should have felt it difficult to say whether a verdict of suicide should be returned as to the deceased, or of manslaughter with respect to the relatives, so glaringly had all the advice of the medical attendant been disregarded. Many a sensitive and zealous practitioner, I am persuaded, must often be worried into ill-health and an untimely grave by that childish caprice which spurns the very counsel for which it proffers a fee; for I am free to affirm, having seen possibly, *as a looker-on*, more medical practice, in my day, than most men not educated for the profession, I never yet knew, in the ordinary course of events, the professional aid of a skilful practitioner resorted to *in good time*, and allowed *fair play*, without beneficial results. But the public, after all, must not be too severely censured; in ordinary education there is little or nothing to give a taste for physiological investigation; and therefore when the most devoted and affectionate kindred are called to tend the sick bed, all is confusion and dismay, when all ought to be calmness and sobriety. I have invariably found that where the parents of my invalid pupils had any taste for natural history, chemistry, structural botany, &c., it was a comparatively easy task to explain the principles on which my medical advisers and myself wished their children to be educated, and especially where mothers have been gifted with self-possession, the cures effected have been by far the most satisfactory. For my own part, so far as the mere

preservation of health is concerned, I have done no more than any one who has had the advantage of witnessing the daily routine of a well-conducted hospital, from time to time, might accomplish; and I should be guilty of ingratitude were I to express myself in any but the highest terms of the kindness and care I personally received in the Sandhurst Infirmary on various occasions, while a student at the Royal Military College. Indeed, with such promptitude were all symptoms of indisposition attended to during my time at the institution, that from the close of the year 1814, to 1819, but one death (from some acute disease of the brain) occurred in the infirmary; and yet one summer within that period—our average number of cadets being then about 360—although scarlatina, or some such malady, prevailed to such an extent that not only all the beds in the infirmary and detached hospital were filled, but the upper dormitories of the left wing were converted into a temporary hospital, a single life was not lost. The clothing of the cadets, the warming and ventilation of the halls of study, dining-halls, and dormitories, and the dietary at Sandhurst, I consider to be eminently conducive to health; and my present success here has been mainly the result of endeavouring to observe the same rules of health in my own establishment, freely availing myself of the medical aid always available at Torquay. The great difficulty in prophylactic education is the study of psychology, with reference to temperament, the normal and abnormal conditions of the system, and the laws of periodic change and development. Finding my views sanctioned by some gentlemen whose names are well known in the medical world, I have felt it my duty to record my experience, such as it is, and begging to express my sense of the readiness with which, without any personal acquaintance, you have invariably permitted me to offer my opinions through the medium of your columns, I have the honour to be, Sir, your obedient servant,

J. A. Walker, Lt. H.P., 34th Regt.

Cliff House, Torquay, June 5, 1843.

TUBERCULOUS DISEASE OF THE DORSAL VERTEBRÆ NOT FULLY DETECTED DURING LIFE.

A child, thirty months old, was placed in the Hôpital Necker in Paris, under the care of M. Trousseau. There was a gibbosity of the spine at about the level of the fourth dorsal vertebra, which had made its appearance in a very sudden manner; yet the general health and spirits of the child appeared in no wise affected. After a short time, however, it took the small-pox, and died on the ninth day. After autopsy, the bodies of two vertebræ were found completely disorganised, and those of the two neighbouring ones for the most part so, their existing osseous structure being infiltrated with tuberculous matter. In front of these four vertebræ was a purulent cyst. The spinal cord, though curved like the vertebræ, was not pressed on by any spicula or fragment of bone; hence probably the absence of constitutional symptoms leading to any diagnosis of such extensive disease as was found. The mesenteric and bronchial glands were almost wholly charged with tuberculous deposits. M. Trousseau, in his clinical remarks on this case, says,—"You must not be surprised at the frequency of tubercles in children who have the external appearance of robust health. In an adult suffering from tuberculous vertebræ, the pains experienced, which are seldom acute, and are by the patient usually considered rheumatic, may lead the surgeon to a suspicion of the real fact; but in children the same transient pains are not sufficient to awake the attention, disturb the sleep, or alter the habitual gaiety of the patient; and the disease progresses without an untoward sign till gibbosity occurs. This absence of general symptoms, however, prevails only when the tuberculous disease and softening are confined to the bony structure of the spine. For if the medullary structures suppurate, the accumulation of pus usually impedes the movements of the lower limbs and causes sluggishness (if not paralysis) of the functions of the bladder and rectum."—*Gaz. des Hôpitaux.*

STATISTICS OF LITHOTOMY.

In the five years, 1836 to 1840 inclusive, twenty-four operations for stone in the bladder took place at the Hôtel Dieu in Paris. In six of these, which were cases of lithotrity, all the patients survived. Of the other eighteen cases, in which lithotomy was performed, eleven were attended with perfect success, and the recovery of the patient, but the seven remaining terminated in death, in one case two months after the operation, and in the rest only from two to five days. In these, seven two of the patients were upwards of seventy years of age. Of the whole twenty-four individuals operated on, thirteen were from three to twenty-five years, three from twenty-five to fifty years, and eight from fifty to seventy-five years of age;—a proportion which seems to indicate that calculus is more frequent in youth than in age, and that middle life is nearly exempt from its access. In 1841 six patients were operated on in the same hospital by M. Roux, on four of whom lithotomy, and on two lithotrity was practised. The mortality in this year was greater than in any of the five preceding; five out of the six patients died; and the case of recovery was one in which lithotomy had been employed.—*Gazette Méd.*, No. 47.

SUDDEN DEATH
SUPPOSED TO
SIMULATE POISONING BY OPIUM.
NON-MEDICAL CORONERS.

To the Editor of THE LANCET.

SIR,—The insertion of the following case and observations in your valuable periodical will oblige your most obedient servant,

J. BERNCASTLE, M.R.C.S., &c. &c.

Croydon, June, 1843.

I was sent for on Tuesday, the 25th April, 1843, at 6 a.m., to attend, on the part of the Croydon union, the illegitimate infant, six weeks old, of a pauper named Aldridge. The child was said to be in a fit. On my arrival at the house I found the child dead. I had scarcely asked the mother and grandmother a few questions when the latter begged of me to examine the body and see that there had been no "misconduct" on their part. I thought that remark rather unusual, and examined the body more minutely, but could discover no marks of violence nor anything to lead me to suppose that the child had not died from natural causes. The face and body were quite pallid, and the mouth and eyes closed, without any unusual appearance.

A few hours afterwards, Mr. Smith, the registrar of deaths, sent to know whether an inquest would be required, as he had heard it reported by the neighbours that the child had died by unfair means. The inquest was consequently ordered, and thinking that I might elicit from the parties a few more points concerning the case, I called again in the afternoon, seven hours after death had taken place, and found the body laid out. I requested that the clothes should be taken off, and to my great surprise I observed the head, trunk, and extremities, to be covered with livid patches of ecchymosis, of a large size, pretty general all over the body. Knowing this cadaveric appearance so soon after death to be one of the common results from poisoning by opium, and having seen it in several cases that had terminated fatally, my attention was immediately directed into that channel, and I asked the friends whether they had given the child any syrup of poppies, Godfrey's cordial, or laudanum, but they stoutly denied having given anything at all.

After cross-examining them pretty closely, I learnt that the child, otherwise remarkably healthy, had been for the last few days uncommonly fretful, and particularly so on the Sunday; that on Monday he became very drowsy, and slept all day and night without intermission, until early on the Tuesday morning, when it was suddenly seized with the convulsive fits that carried it off, and to relieve which I had been called in.

The history of the case, coupled with the appearance of the body after death, being, as every medical man well knows, exactly those of poisoning by opium, the impression on my mind at the time was that the child might have died from the effects of that drug, or some of its compounds, either given intentionally or in an overdose through ignorance. The child being illegitimate might have also tended to strengthen the first suspicion. In fact, had the child been known to have died from opium the appearances above named would be all that one would expect to find without an autopsy.

Well, what did Mr. Carter, the coroner for Surrey, do? Instead of being guided by the medical evidence, and using it as the means to come at the truth, he at once turns round upon me and wishes to persuade the jury that there are no grounds whatever for presuming that the child had died from any other than natural causes! That he had frequently seen the livid appearance of the skin, which *always* arose from persons lying after death; that infants *frequently* died from *apoplexy*, and the like trash; that, besides, it was absurd to suspect that anything had been given when the mother and two other respectable witnesses swore to the contrary; that they being respectable people (all three paupers, and interested parties) he was bound to believe them on their oath, and that he did not think a post-mortem necessary, as there was not the *slightest tittle of evidence* to prove that anything in the shape of narcotics had been administered! Now the chain of symptoms and circumstantial evidence throughout this case were so clearly those of death by opium, and so unlike death from any other infantile disease, that nothing but the grossest ignorance on medical subjects can excuse Mr. Carter for having so totally overlooked them and disregarded the suggestions of the medical witness. On the contrary, he so far *forgot his duty* that he actually, in summing up the case to the jury, endeavoured to throw a slur upon the medical witness by inferring that he had acted wrongly by at all exciting suspicions in a case where nothing whatever could warrant any person in supposing that the child had died from any other than natural causes.

But had a post-mortem taken place, and, in spite of the oaths of these three *very respectable witnesses*, poison had been found in the child's stomach, annulling all doubt upon the subject, and such cases are not uncommon, would he have thought then so lightly of medical evidence?

The case was dismissed summarily, and all parties entirely exculpated from any blame, the verdict being, "Died from natural causes."

Now would not a *medical coroner* at once have fallen in with the views of the medical witness, and would not his attention have

been seriously arrested upon the probability of poison in a case where all the circumstances were so well linked together as to raise rather more than a suspicion of guilt? Is it not generally by some vague unconnected facts that cases of poisoning are at first brought into notice? Before detecting the poison are there not premonitory and concomitant signs and circumstances that put one on the *qui vive*, and lead one to seek for it by further anatomical investigations? How, then, can any person not well acquainted, practically as well as theoretically, with this intricate branch of the profession, presume to offer his opinion on subjects of such importance that they may involve the life of a fellow creature? It is an anomaly that cannot exist any longer in a country that boasts of ranking first in civilization. The time must come, and come shortly it will, when none but medical coroners will be allowed to fill that high office. Until then, we must not be surprised to see doubtful cases smothered in a similar way to the one here cited by Mr. Carter, or any other of his sapient non-medical colleagues.

*** We do not think that Mr. Berncastle has selected a good case for illustrating his views. The law is not in a condition to justify coroners in ordering post-mortem examinations in *all* cases of sudden death, and if Mr. Carter did not exercise some discretion on the subject, he would soon find out, at the Court of Quarter Session, to his cost, that he was making presents of fees to medical witnesses out of his own pocket. Whether the law is right in this respect, is another question. It must be obeyed as it stands, good or bad. Most certainly a coroner would not be justified in having a body opened simply because it was that of an illegitimate child and the parent was poor. A more unjust and odious rule it would be difficult to adopt. The only other ground, in the present state of the law, for directing an examination in the case of Aldridge (judging from the statement of our correspondent) was the suspicion raised by the medical witness himself, from an external view of the body; and in reply to this we may observe that the data for that suspicion were not well founded. Where Mr. Berncastle has seen one such body as he has described, our own experience has extended to scores, if not hundreds, and—to be brief where the occasion does not warrant an essay—we state that a medical witness may as well look at the outside of a block of oolite limestone to judge whether an unfortunate toad is shut inside, as at the exterior of a dead body to pronounce whether the death has been produced by poison. Even a non-medical coroner may arrive, by experience, at a well-grounded assurance of this fact, the authorities, in books, having written so many fables, instead of truths, on many of the most important points in medical jurisprudence.

NEW ASTRINGENT PREPARATION.

By digesting rhatany in sulphuric ether a brown extract is obtainable, perfectly soluble in distilled water, and when placed on the tongue giving a sensation of great astringency, followed by heat and dryness. This extract, invented by a M. Tissier, of Lyons, has been employed with success in that city in passive hæmorrhages, particularly those consequent on non-contraction of the uterus, as after prolonged labours and miscarriages. It has also been used with advantage for leucorrhœa, blennorrhœa, gleet, &c. The dose in which it has hitherto been employed is a tablespoonful of a mixture composed of from five to ten grains of the extract in six ounces of some appropriate vehicle; in leucorrhœa, topical injections are recommended of from two to five grains of extract in a pint of barley-water. The presence of this preparation in the stomach gives rise, generally, to a sensation of heat in the epigastrium, though this rarely proceeds so far as to become painful; great thirst, and a pulse often as full as in gastritis, also prevail. These symptoms are, however, transient, and readily quelled by lemonade or other mild drinks. Should the injection irritate the urethra too greatly, it is only necessary to suspend its use for a short time.—See *Gazette des Hôpitaux*, June 6th ult.

Treatment of Spinal Pains in Chronic Intermittent Fever.—The local pains along the vertebral column which have frequently been observed as an accompanying symptom of intermittent fevers, have been ascertained, by Dr. Gouzée, of Antwerp, through the medium of experimental pressure, to originate more particularly about the place of the third, fourth, and fifth dorsal vertebræ; and the remedial agents recommended by him, in obstinate intermittents attended by spinal pains, consist of cupping and leeches in the dorsal region, followed by counter-irritant plasters of tartarised antimony. The doctor informs us that this treatment has, in his hands, been very generally successful; but, says the "Gazette des Hôpitaux," we must confess that the method is so unusual that further experiment is necessary ere it can be recommended for general adoption.

SUDDEN DEATH—OSSIFICATION OF THE AORTIC VALVES.

To the Editor of THE LANCET.

SIR,—I beg to inclose the following case for insertion in your valuable Journal, and remain your obedient servant,

R. H. SEMPLE, Surgeon.

Sans-buildings, Islington,
June 30, 1843.

Mrs. K., ætat. 69, a lady of very active habits, of mild and benevolent disposition, temperate and abstemious, of rather tall stature and spare figure, had always enjoyed good health, with the exception of an inflammatory attack in the chest about twelve years ago, the exact nature of which I have no means of ascertaining. Although intimate with her and her family for the last ten years, I had never known her to complain of any illness. Since her death, however, I have been informed that she had suffered occasionally from slight attacks of dyspepsia, and also from difficulty of breathing and faintness; but the symptoms were very transient, and never required medical assistance. On Monday last, at a quarter to four in the afternoon, I was requested to see her immediately, as she had fallen down in a fit, although she had been previously in a perfect health. At the time of the attack she was standing in the kitchen superintending the affairs of the family, when she suddenly fell down; and when I arrived immediately afterwards, I found her lying on the floor with a pale countenance and feeble pulse. I endeavoured, with the assistance of the servants, to place her upon a sofa. Mustard-poultices were immediately applied to the feet, and spirits of hartshorn held to the nose, but we had scarcely lain her upon the sofa, when she expired.

A Post-Mortem Examination

was performed forty hours after death, when the following appearances were observed:—There was lividity on many parts of the body, apparently from gravitation, the lividity being chiefly observable on the under surface. There was very little fat beneath the skin.

Head.—The vessels of the scalp were congested, and some blood flowed from a vein of the skull opposite the *torcular Herophili*. The skull presented no remarkable appearance. The dura mater was slightly adherent to the inner table of the skull on the left side. A considerable quantity of fluid blood was seen lying between the skull and the dura mater. The arachnoid membrane was opake, and there was a considerable quantity of thin serous fluid effused beneath it; the veins of the pia mater were congested, especially in the posterior part of the brain. The brain itself, with the exception of being a little softer than usual, was quite healthy, and the only appearances worthy of notice were the effusion of serous fluid and the congested state of the meningeal vessels above described.

Chest.—The lungs were quite healthy, with the exception of slight congestion. The heart appeared externally to be larger than usual, but not remarkably so. There was very little fluid in the pericardium. The right auricle and ventricle were perfectly healthy. The left auricle was also healthy. The mitral valves were thickened by a deposition of semi-cartilaginous substance. The parietes of the left ventricle were very much thickened, but the cavity was of the usual size. The aortic valves were found very much diseased, and on looking at them from the aorta, they appeared completely to close up the passage. They were found to be converted into masses of bone, which almost filled up the valvular orifice, leaving only a small chink for the passage of the blood. These bony masses were rough and nodulated, and were deposited within the sinuses of the valves, and one portion of great size extended from one of the valves down into the cavity of the ventricle. The lining membrane of the aorta also presented a great number of bony plates.

Abdomen.—The liver presented no remarkable appearance. The stomach was full, the deceased having eaten her dinner a short time before the fatal occurrence. The kidneys were congested, and their cortical substance presented a granular appearance,

In this remarkable case of ossification of the aortic valves there were no symptoms whatever during life to denote the existence of so formidable and dangerous a disease. If the stethoscope had been applied there can be no doubt that a bellows or sawing murmur would have been heard over the upper part of the precordial region, but as the subject of this case never made any complaint or sought medical assistance, the existence of cardiac disease could not even be suspected.

TREATMENT OF CONSUMPTION.

DR. BEHREND, of Berlin, has employed with decided success the treatment for tubercular phthisis recommended by Sir C. Scudamore, particularly in the inhalation of iodine in vapour. Instead of the quinine and other tonics, however, prescribed as auxiliary remedies by our countryman, Behrend employs cod-liver oil, on which he seems to pin great faith, prescribing it in doses of two or three tablespoonfuls daily, for as long as it can be borne. In respect of diet he advises the use of animal food twice a-day, a little wine of good quality, and chocolate instead of tea or coffee.—*Hufeland's Journal.*

MR. HIGGINBOTTOM'S TREATMENT OF ERYSIPELAS WITH THE NITRATE OF SILVER.

To the Editor of THE LANCET.

SIR,—I observed in THE LANCET of the 22nd of April last, that Mr. Erasmus Wilson in his lectures has not stated my method of applying the nitrate of silver in erysipelas quite correctly, and I am desirous, through the medium of your Journal, to correct the error.

Mr. Wilson says, "Mr. Higginbottom recommends its employment in a weak solution; the strength of the solution may vary from five to fifteen grains of the nitrate of silver to the ounce of distilled water." In my essay on the use of the nitrate of silver I have nowhere recommended the application of it in solution, but always in a solid form. The following is the direction I have given:—"The part is first to be washed in soap and water to remove any oily substance from the skin, and then it is to be wiped dry; the inflamed and surrounding skin is then to be moistened, and a long stick of the nitrate of silver is to be passed over the moistened surface, taking care that not only every part of the inflamed skin should be touched, but the surrounding healthy skin to the extent of an inch or more beyond it, in severe cases. The nitrate of silver may then be passed over these surfaces once, twice, thrice, or more times, according to the degree of inflammation; once in slight cases, twice or three times in common cases, and more frequently if quick vesication be required."

The use of a weak solution, as named by Mr. Erasmus Wilson, as an application in erysipelas would, I imagine, very soon bring the remedy into discredit, as it could not possibly succeed in extinguishing the inflammation or preventing its progress. In my own practice, for the last eight or nine years, since the second edition of my essay, I have, for convenience, used a solution of the nitrate of silver, but of a very different strength to the one mentioned by Mr. Wilson, viz., eight scruples of nitrate of silver, with twelve drops of nitric acid, in one ounce of distilled water. This concentrated solution I have used in the same manner as I would the solid stick, according to the various degrees of inflammation, applying it with a dossil of linen tied on the end of a small stick, in preference to a camel-hair pencil. I would here also remark that Mr. Nunneley, of Leeds, in his work on Erysipelas, has fallen into the same error in reference to my essay, in recommending the use of a weak solution of "eight or twelve grains of the nitrate to one ounce of distilled water, or six grains in the same quantity of rectified spirit."

The success of the nitrate of silver in external inflammation depends upon its strength and its proper application. The method of applying it by some practitioners appears to me to be quite trifling with the remedy. Instead of covering the whole inflamed surface and the surrounding healthy skin with the nitrate of silver, so as to cover the whole of the inflammation, they simply apply it around the inflamed surface,—a mode of proceeding which has seldom the power of even preventing the spreading of the disease, or the deeper mischief when the inflammation itself is unarrested. Sometimes, even after the most decided application of the nitrate of silver, the inflammation may spread, but it is then generally much feebler in character, and easily checked by the repeated application of the remedy.

In severe cases of inflammation, in which there may be a suspicion of deep-seated suppuration, a poultice of bread and water, or a plaster of neutral ointment, may be applied after the nitrate of silver, to keep the surface soft for a future examination.

In conclusion, I would add that I consider the application of the nitrate of silver as perfectly safe. I have seen no case of metastasis or any other bad effects from the use of it during upwards of twenty years. I purpose, at a future period, to make some further statements in corroboration of the success of the external application of the nitrate of silver, in an addendum to the second edition of my essay. I remain, Sir, your obedient servant,

J. HIGGINBOTTOM.

Nottingham, June 27, 1843.

NAPHTHALINE AS AN EXPECTORANT

THIS substance, when applied to the tongue, causes a peculiar heat and pricking sensation, which extends down the throat and bronchial tubes, and exciting a spasm of the latter, ends in inducing a cough of a kind very efficacious in clearing the air-cells and canals of accumulations of mucus. It is, therefore, a remedy highly suitable in the asthmatic coughs of old people, and others who, from debility, are unable to expel the matters which clog the pulmonary membrane. M. Dupasquier, of Lyons, prescribes it in the form of a syrup and an electuary. The former is composed of fifteen grains of naphthaline, suspended by a small quantity of boiling alcohol in about four ounces of syrup, of which the dose is a teaspoonful every quarter of an hour until expectoration. The other form consists of naphthaline well mixed with any simple electuary, in the proportion of eight grains of the former to half a drachm of the latter; dose, a tablespoonful every quarter of an hour, as before.—*Gazette des Hôpitaux.*

MEDICINAL USE OF COD-LIVER OIL.

A Belgian author has lately published a work in which he strongly recommends the above medicinal agent for scrofulous diseases, rickets, and mollities ossium. He cites three cases of its utility in the first-named class, one being that of a girl seventeen years of age and of a cachectic habit, having ulcers on the chin and face, enlarged glands in the neck, imperfect performance of menstruation, digestion, &c., of all which she was cured in about eleven weeks, after having taken about nine pints of the oil. A child, six years old, was cured of a scrofulous ulcer on the arm in the course of a month by daily doses of an ounce of the remedy (taken, however, *avec repugnance*, we are told); and a girl, eleven years of age, with a great number of enlarged glands in the neck, was *radically* disembarrassed of her disease after having taken between four and five pints of oil.

Three cases of rickets are cited, in children aged from two to four years, in which the disease yielded to aggregate doses, varying from one hundred to one hundred and eighty drachms. The only case alleged of the efficacious use of the oil in mollities ossium is one of a female, aged thirty eight years, of lymphatic constitution, and the mother of five children, who, after having been the subject of rheumatism in various parts of the body for eight years, was at length so afflicted with pains in the bones of the pelvis as to be obliged to keep her bed during the whole of her sixth pregnancy. After her delivery a process of cure was ensured by daily doses of twenty-five drachms of the oil supported by a nourishing diet; and a complete restoration to health was effected in about four months. *Annales de la Société de Med. de Gand.*

In connection with the above it may be mentioned that Dr. Bauer, of Tübingen, affirms, as a result of his experiments, that the action of cod-liver oil differs in no wise from that of other fatty oils; and his experiments have produced the same effects from the use of many others; but he repudiates the internal exhibition of any of them, and brings forward many successful instances of its use in obstinate cases of scrofula, hinting also, though somewhat diffidently, at its employment by way of friction and baths, in cases of confirmed tuberculous phthisis. —*Gazette des Hopitaux.*

A Russian chemist has found out a method of ensuring a supply of milk extemporaneously. He evaporates newly-drawn milk at a gentle heat till it is converted into a fine powder, which is kept in closely stopped bottles, and affords good milk on being mixed with water, even after a considerable lapse of time.

AGENCIES INFLUENCING THE CIRCULATION AND CONDITION OF THE BLOOD IN REPTILES.

The researches of Gluge on the circulation in frogs have established the following facts:—On the sudden immersion of the feet of a frog in hot water the circulation is at once arrested and the blood coagulated; but the progress of the blood is soon re-established in the toes, and gradually in the other parts of the foot. The circulation (in frogs) is kept up for about twenty-five hours after the destruction of the brain and spinal cord. After the section of the crural plexus the same process is maintained for upwards of six days in the paralysed extremity, and it lasts ten days when only the spinal cord is cut at some point between the heart and the lower extremities. A considerable loss of blood greatly disturbs the circulatory process, paralyses the heart's action, and quickly destroys nervous excitability. The elliptical globules in the blood also diminish greatly in number, and are replaced by spherical globules. On suppressing the transpiration, as by varnishing the surface of the body, the blood remains liquid, and the cellular tissue and serous membranes become filled with fluid. When the respiration as well as the transpiration is suppressed, as in the case of frogs plunged into oil, the circulation is still kept up for two days.

A frog was inoculated with the blood of a man attacked with farcy; in three other frogs shreds from the stomach of a putrefying corpse were inserted beneath the skin; and under the skin of a fifth reptile a portion of decomposing muscle was placed. Paralysis of the heart and interruption of respiration ensued, with an altered state of the blood and exudation of it through the tissues,—in fact, true scurvy. No immediate effect was perceptible on the nervous system, but this soon became secondarily affected consequently on the alteration of the fluids.—*Schmidt's Jahrbuch*, vol. xxxvi.

The transverse white bands of cerebral matter on the floor of the fourth ventricle in the brain, which have been supposed to exert some share in the faculty of hearing, would appear, on the evidence of two recorded cases of disease, to have no such function. Dr. Sutherland reports one of these cases, in which, after death, the *iter a tertio ad quartam ventriculum* was found inflamed, and the floor of the fourth ventricle presented a deep blush of red, and was somewhat softened; hearing had, however, continued perfect. And Müller states that in the museum at Berlin is the brain of a young female who, having fallen on the occiput, had died paralytic; here, also, effusion of lymph into the ventricle was found, yet hearing had remained intact.

PROTO-IODIDE OF IRON, AND ITS EFFECTS IN PHTHISIS.

This substance, as prepared by Professor Dupasquier, of Lyons, has been now for some years employed with success in the Hôtel Dieu of that city as a remedy in cases of phthisis pulmonalis. Dupasquier's preparation differs essentially from that previously in common use under the name of proto-iodide of iron, which was in fact a compound of proto and dento-iodide of iron, with free iodine and peroxide of iron mechanically intermixed. It was solid and uncrystallisable. Dupasquier's salt, on the other hand, is reported to be a true proto-iodide, and though it is procurable in a solid form, it is in that case so deliquescent and apt to be decomposed by the atmosphere, that it is commonly kept in the form of a solution, in which condition it is unaltered by contact with the air. In this state it is a colourless inodorous liquid. The solution for administration in practice, as used by M. Dupasquier, consists of one part of the proto-iodide to five of water or mucilage, of which the dose varies from ten to twenty drops.

The first action of this substance, as noticed both in the healthy individual and in the subject of disease, is excitant, and is manifested particularly on the circulatory system. The pulse soon augments in frequency, and the heat of the surface is considerably increased. In some cases symptoms of gastric disturbance, and irritation of the rest of the mucous membrane, supervene; anorexia and thirst may be present; the throat and fauces may become slightly inflamed, and may even exhibit a papular eruption. Nausea, vomiting, and constipation, sometimes ensue. But it is in comparatively few instances that, after ordinary doses, symptoms are perceived of such intensity, and in nearly all cases they soon disappear. In any case the diminution or discontinuance of the remedy seldom fails to cause their disappearance. In the lapse of a fortnight or three weeks a decided tonic effect is made manifest; the pulse diminishes in rapidity while it acquires vigour, the heat of the surface decreases, and the patient gains flesh and strength.

In cases in which the effect of the remedy has been tried on a healthy person, the system at this period takes on a tendency to plethora, which is sometimes accompanied by dyspnœa, congestion of the lungs, cephalalgia, and other cerebral disturbances, as well as occasionally eczema, lichen, or other cutaneous affections. But these symptoms rarely exhibit themselves in any intense degree in phthisical subjects, whose cough and expectoration, however, notably diminishes at this stage. M. Boissiére, who carefully watched the administration of the proto-iodide in twenty-seven cases at the Hôtel Dieu, Lyons, says "at the end of about a month after the first administration of the proto-iodide the expectoration has often decreased to a half, a quarter, or even an eighth of what it had been previously. I have remarked, in six cases, the cough and expectoration to cease entirely; in four of these the cessation occurred in about forty days, in the two others as early as the fifteenth day. I recognised marked beneficial effects of the proto-iodide in five out of six cases in which tubercles had previously existed in the lungs. In two of these I have noticed the complete cessation of the *bruit d'expiration* and *souffle bronchique*, with a return of the respiration to its natural state and a decided alleviation of the other symptoms; in one case, at the end of two months, and in the other in a fortnight. The influence of the medicament on the functions of digestion and nutrition is very strongly manifested. In seven-eighths of the patients to whom it was administered, there occurred within the lapse of from a week to fifty days, a restoration of the appetite, a cessation of the nausea previously produced by food, of the secretion of foul mucus about the mouth, &c. The weight at the epigastrium, the febrile access during digestion, and the marasmus gradually disappeared; the visage lost its pale, clayey aspect, and the muscles their feebleness and flaccidity." Many other interesting details on the subject are given in the "Gazette Medicale" of Dec. 24th, ult., to which we refer our readers. Of the twenty-seven cases above cited, seven terminated in death before the proto-iodide had had time to exert much of its influence; but in all the rest considerable advantage is reported to have been derived from the remedy, and one patient was discharged without a remaining symptom of disease. M. Boissiére concludes that the proto-iodide of iron acts in the cure of phthisis at once as a tonic, an astringent, and a resolutive agent. As a tonic it restores the healthy performance of the functions of digestion, assimilation, and hæmatosis; its astringent effect is displayed in causing a cessation of expectoration and night-sweats; and its resolutive power in promoting absorption of the tubercular matter deposited in the lungs. It is probable, however, that its effects on the lungs, stomach, skin, &c., are but secondary, and that its primary action is exerted on the mesenteric glands, which are so constantly diseased in phthisis, iodine and its compounds having a peculiar elective action upon glandular structures. If this view be correct, other preparations containing iodine, besides the proto-iodide of iron, will be found to have a salutary influence over phthisis, and it is likely that in the course of future researches after a specific for this insidious disease, the utility of all these as remedies against it may become established.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 27, 1843.

EDWARD STANLEY, F.R.S., President.

On the Influence of Rickets on the Growth of the Skull. By ALEXANDER SHAW, Esq., Surgeon to the Middlesex Hospital.

THIS paper was the sequel of one by the same author, printed in the 17th volume of the society's "Transactions." The object of the former communication was, in the first place, to prove that besides causing softening and distortion of the osseous system, rickets has the effect of arresting the process of growth; and, secondly, to show that, owing to this interruption, the proportions of the figure peculiar to the adult are not perfectly attained by persons affected with the disease, but continue to be more or less those of the child.

The figure of the child is characterised by the head, trunk, and upper extremities being of large dimensions compared with the pelvis and lower extremities; while that of the adult has the former parts relatively small, and the pelvis and legs large and powerful. In persons deformed from rickets the whole figure is stunted, but the head, trunk, and upper extremities together, when compared with the natural adult's dimensions, are only defective to a slight degree (1-13th), while the pelvis and lower extremities are defective to a great degree (1-3rd). This difference the author accounted for by supposing that as the disease stops the growth, it interrupts at the same time the change then in progress of being produced in the relative proportions of the figure, and so causes the patient, when arrived at adolescence, to exhibit traces of the configuration of the child. Having referred to the importance of this view in relation to the size of the pelvis in child-bearing women deformed from rickets, and stated that by measuring numerous specimens he had ascertained that the defect of growth in this part amounts, on an average, to nearly a quarter of the natural size, he proceeded to apply the same principle to the explanation of a peculiarity in the form of the head which he had observed as a general character in ricketty persons.

This peculiarity consists in a disproportion between the size of the cranium and of the face. Between infancy and adolescence a change in the relative proportions, analogous to that which occurs in the figure generally, takes place in the skull. Near birth its form is characterised by the cranium being of large bulk compared with the face; while at adolescence the contrast is greatly diminished, owing to the face having become much bulkier in comparison with the cranium than it had originally been. The author had remarked, and confirmed his observation by numerous measurements, that the skull in ricketty persons does not attain the proper adult proportions, but on the contrary the cranium appears remarkably large compared with the face, just as during childhood. Thus, taking the dimensions of the face as the unit of comparison, he found that in the skull of the infant the size of the cranium is as eight to one; in the adult as six to one; and in the ricketty person (although beneath the standard size) as seven to one. He explained this disproportion by supposing that as rickets arrests the growth it interrupts at the same time the change occurring in the relative proportions of the skull between infancy and adolescence, and thus gives rise to the child-like character of the proportions. The proposition was illustrated by showing the contrary effects which an increased activity of the growth produces. In the figure generally, when the growth has been preternaturally active, as in tall persons, the effect of the unequal rate of development in the divisions of the frame is shown by the lower extremities acquiring an undue length compared with the trunk; so in the head the face becomes disproportionately large compared with the cranium; thus, by measuring the skull of the giant preserved in the museum of the College of Surgeons, the author found that the dimensions of the cranium (although above the standard size) are to those of the face only in the proportion of five to one in that skull.

Having next shown that the orbits always preserve a uniform size, whatever be the difference in the dimensions of the face, in skulls of different proportions, and accounted for this fact by referring to the anatomical relation of the frontal and maxillary sinuses to their cavities, and showing that the two sinuses vary in capacity according to the rate of growth, he passed to the consideration of the growth of the maxillary bones. After dwelling on the difference in the mode of formation of the teeth, as compared with the jaw-bones, and the importance of an exact relation being preserved between the development of both parts, and referring to the observations of Hunter regarding the different rates of growth in the anterior and posterior divisions of the maxillary bones, he concluded by observing that as rickets has the effect of interrupting the growth of the jaw-bones, it deranges also the process of evolution in the teeth.

Statistics of Cases in Bethlem Hospital, with Remarks on Insanity. By JOHN WEBSTER, M.D.

In this paper the author brought before the society a few statistical tables compiled from the registers of Bethlem Hospital, accompanied by a synopsis of seventy dissections recently performed at that institution.

According to these tables it appears that four thousand four hundred and four curable

patients of both sexes were admitted during the last twenty years, of whom one thousand seven hundred and eighty-two were males and two thousand six hundred and twenty-two females, thus giving 47 per cent. more women than men. During the same period one thousand four hundred and forty-six female patients were discharged cured; that is, 55¼th per cent. on the admissions, whilst only eight hundred and twenty-three male patients left the hospital convalescent, or 46½th per cent. On the other hand, the number of deaths in both sexes, although exactly equal, or one hundred and twelve of each, yet calculated according to their respective admissions, the rate among the male patients was 6¼ per cent., and only 4¼ per cent. among the females. Similar results were likewise found to prevail among the incurable lunatics of both sexes. The author, therefore, concludes that insanity is not only more common among women than men, but also a more curable disease, so that, *cæteris paribus*, the prognosis may be considered as more favourable in female than male patients.

The diminished rate of mortality and greater proportion of recoveries are also clearly shown by the records of the institution, since it appears that during the three years ending the 21st December, 1752, the proportion of patients discharged cured was only 31¼ per cent. on the total admissions; whilst for the three years ending December 31, 1842, the cures amounted to nearly 55 per cent. The ratio of deaths, also, during the former period was as high as 25½ per cent., but only 5½ths during the last-named three years, that is, about one-fifth the amount reported nearly a century ago.

The author next remarks on the diminished number of suicides in the insane patients admitted into Bethlem, observing at the same time its greater frequency amongst females than males. A synopsis is next given of seventy dissections recently made by Mr. Lawrence, in which the various morbid appearances met with are carefully detailed.

The author concludes his paper with an allusion to the two sections of pathologists at present dividing the opinions of medical writers respecting the diseased alterations of structure met with in cases of insanity, namely, the "anatomists and vitalists," the former considering them as causes, the latter only as consequences of the previous mental affection. In his opinion the theory of the anatomists is the more rational, and most in accordance with the present state of our knowledge of the pathology of mania.

On the Presence of Spermatozoa in the Fluid of Hydrocele. By E. A. Lloyd, Esq.

The object of the author was to announce that since the last meeting of the society he had met with a third case of hydrocele, in the fluid of which an immense number of spermatozoa were present. The fluid was of a paler colour than that of common hydrocele of the tunica vaginalis, and very much resembled water with which a very small quantity of milk had been mixed. When tested with nitric acid, and also with heat, the fluid was found to contain a considerable quantity of albumen. There was also much saline matter in it. When examined with the microscope, from three to four hours after it was drawn off, there were seen spermatozoa in a living state, and also an immense number that were dead; moreover, the fluid contained a few blood-discs, transparent cysts, granular bodies of different sizes, and epithelial scales. The testis and its appendages were healthy. From the situation and form of the tumour it appeared that the fluid was contained in the tunica vaginalis. The spermatozoa were seen in a living state by Mr. T. Wood, surgeon, of Brownlow-street, and by Mr. John Quekett, of the College of Surgeons.

Pathological Researches into the Local Causes of Deafness based on One Hundred and Twenty Dissections of the Human Ear. By Joseph Toynbee, F.R.S., Surgeon to St. George's and St. James's Dispensary.

The researches, of which this is a summary view, are in continuation of a previous paper contained in the 24th vol. of the society's "Transactions." The principal practical conclusion to which they lead is, that the most common cause of deafness is chronic inflammation of the mucous membrane which lines the tympanic cavity; and that by far the greater majority of cases commonly called nervous deafness ought, more properly, to be attributed to this cause. The pathological conditions to which inflammation of the mucous membrane gives rise are divided in the paper into three stages.

In the first stage, the membrane retains its natural delicacy of structure though its blood-vessels are considerably enlarged and contorted; blood is effused into its substance, or, more frequently, at its attached surface. Blood has also been found between the membrane and the membrane of the fenestra rotunda, and in very acute cases lymph is effused over its free surface.

The second stage is characterised by the following pathological conditions:—

First, the membrane is very thick, often pulpy and flocculent. In this state the tympanic plexus of nerves becomes concealed, the base and crura of the stapes are frequently entirely imbedded in it, while the fenestra rotunda appears only like a superficial depression on the swollen membrane.

Second, concretions of various kinds are visible on the surface of the thickened membrane. In some cases these have the con-

sistence of cheese, and are analogous to tuberculous matter; in others they are fibro-calcareous, and exceedingly hard.

Third, by far the most frequent and peculiar characteristic of this second stage of the disease is the formation of membranous bands between various parts of the tympanic cavity. These bands are at times so numerous as to occupy nearly the entire cavity; sometimes they connect the inner surface of the membrana tympani to the internal wall of the tympanum, to the stapes, and to the incus. They have also been detected between the malleus and the promontory, as well as between the incus, the walls of the tympanum, and the sheath of the tensor tympani muscle, as well as between various parts of the circumference of the fenestra rotunda; but the place where the adhesions are most frequently visible is between the crura of the stapes and the adjoining walls of the tympanic cavity; this was the case in twenty-four instances out of a hundred and twenty dissections, being a fifth of the number. These kinds of adhesion sometimes contain blood and scrofulous matter.

In the third stage of inflammation of the membrane it becomes ulcerated, the membrani tympani is destroyed, and the tensor tympani muscle is atrophied. The ossicula auditus are diseased, and ultimately discharged from the ear, and the disease not unfrequently communicates itself to the tympanic walls, affecting also the brain and other important organs.

The following is a tabular view of the state of the mucous membrane of the tympanic cavity in the 120 dissections related in the paper:—

In the First Stage of Inflammation.

1. With simple inflammation of the membrane, its vessels being enlarged, tortuous, and distended with blood, 10.
2. Ditto, with an accumulation of mucus, 1.
3. Membrane inflamed, with effusion of blood into its substance, 3.
4. Membrane inflamed, with effusion of serum tinged with blood into the tympanic cavity, 1.
5. Membranes inflamed, with lymph effused into the tympanic cavity, 2.
6. Membranes inflamed, with blood and lymph effused into the tympanic cavity, 2.
7. Membrane inflamed, with effusion of pus into the tympanic cavity, 1.

Dissections illustrative of the Second Stage of Inflammation.

1. With simple thickening of the lining membrane, 5.
2. The membrane thick and pulpy, 2.
3. Ditto, and the cavity full of bands of adhesion, 1.
4. The membrane thick and flocculent, 1.
5. Membranous bands connecting the membrana tympani to the inner wall of the tympanum, 5.
6. Membranous bands connecting the membrana tympani to the promontory, and the chorda tympani to the stapes, 1.
7. Membranous bands connecting the membrana tympani to the incus, 1.
8. Ditto, to the stapes, 2.
9. Ditto, connecting the membrana tympani and chorda tympani nerve to the stapes, 1.
10. Ditto, connecting the membrana tympani and malleus to the promontory, 1.
11. Ditto, connecting the membrana and chorda tympani to the incus, 2.
12. Ditto, connecting the membrana tympani and ossicles to the inner wall of the tympanum, 1.
13. Ditto, connecting the malleus to the inner wall of the tympanum, 2.
14. Ditto, connecting the incus to the inner wall of the tympanum, 1.
15. Ditto, connecting the stapes to the promontory, 24.
16. Anchylosis of the stapes to fenestra ovalis, 2.
17. Membranous bands forming a net-work over the fenestra rotunda, 2.
18. A broad membrane passing from the promontory to the mastoid cells, 2.
19. The cavity of the tympanum full of bands of adhesions, 1.
20. Membranous bands containing scrofulous matter, 3.
21. The cavity of the tympanum full of calcareous concretion, 4.
22. Ditto, full of caseous concretion, 2.
23. With ridges of bone projecting from the surface of the promontory, 2.

Dissections illustrative of the Third Stage of Inflammation.

1. With ulceration and thickening of the mucous membrane, attended by the formation of pus, 3.
2. With ulceration of the membrane and loss of one or more of the ossiculæ, 3.

It thus appears that of the 120 dissections there were—20 specimens in the first stage of inflammation, 65 in the second stage, 6 in the third stage, and 29 in a healthy state.

This being the last meeting of the session, the society adjourned until November next.

Suppression of Pus.—The discharge from a child's ear, or a gleet in a man, is suddenly suppressed. Pain and danger ensue, and are ascribed to the suppression; but they ought to be attributed to the *increase of inflammation* to an extent which is inconsistent with the secretion of purulent matter. Leeching and fomentation are obvious. In wounds and ulcers the secretion must be re-established by wine, bark, and stimulating fomentation.—*Sir Charles Bell.*

THE LANCET.

London, Saturday, July 8, 1843.

A LODGER at a working jeweller's in Southampton-row, Russell-square, recently wrote to the Duke of WELLINGTON to ask his grace whether he had "seasonably, sufficiently, and paternally warned the people "of Ireland" to drop the repeal agitation. The field-marshal presented his compliments to the lodger, and begged to inform him that he (the field-marshal) was "one of those "few men in these days who do not meddle "with questions over which they have no "control,"—a rough hint which suggests a like remark to the sapient Alderman FAREBROTHER, Mr. ANDERTON, Sir CHARLES PRICE, and the twenty-seven other governors of Bethlem Hospital who put a check, on Monday fortnight—at a general court of the governors in the hall in Blackfriars—upon an improvement in the treatment of the inmates of the hospital, by voting against the introduction of a new species of amusement for their use as a remedial means.

The report of the special committee on that occasion recommended various alterations and ameliorations in the treatment at Bethlem. Much debate, says the *Morning Post*, ensued on the proposition of the committee, "That a billiard-table should be hired in "order to promote the exercise and amuse-"ment of the inmates." Mr. ANDERTON expressed his *surprise* at such a recommendation, because, first of all, lunatics could not play at games, and in the next place for as much as that a person who was *capable* of playing at games of chance was not fit to remain in a lunatic asylum; and if it were intended to introduce all those comforts and luxuries the patients would never wish to leave! He thought that billiards would lead to excitement, and, by promoting a system of gambling, have an injurious effect, and therefore moved that the paragraph recommending the billiard-tables be expunged from the report. Mr. T. B. HERRING told Mr. ANDERTON that cards, draughts, and chess, had been the amusement of the patients in Bethlem Hospital for these twenty years. Mr. Alderman FAREBROTHER added that he, too, thought the introduction of a billiard-table calculated to *encourage gambling*, and would so taint the patients, that when they left the hospital they might have recourse to such practices, which would probably lead them to ruin. For these reasons, and there being *no recommendation from the physicians* before the court, he seconded Mr. ANDERTON'S motion. Very admirably did Mr. LAURIE, jun., answer these ill-informed gentlemen. He stated to them the fact that the recommendation of the committee had been unanimously agreed to at the largest committee at which he had ever been present; and in reply to Mr. ANDERTON'S remarks that insane patients could not play at games of chance, he begged to say that cards were originally introduced for an insane king. He thought that refusing to allow amusements in the hospital, for fear of encouraging dissipated habits when the patients went out, was about as rational as it would be to refuse administering wine and spirits to sick persons, lest it should encourage them to resort to dram-drinking on their recovery. He considered a billiard-table would be of great service, particularly in the winter time, or in bad weather, when the inmates *could not go into the grounds*, or be induced to take *any other exercise;* and although the physicians had not appended their recommendation to the report, he had received a letter from Dr. MONRO, the senior physician, stating that there could be *no* objection to the introduction of billiards and bagatelle. The learned gentleman quoted several lunat asylums where, amusements and occupation being carried out to the greatest extent, cures were effected *in far greater proportion than at Bethlem.* He called upon the governors to avail themselves of the improvements adopted in other asylums, and place the Royal Hospital where it ought to be, in the front rank of all, instead of dragging in the rear

of pauper lunatic asylums. Dr. WEBSTER, the Earl of SHAFTESBURY, and the COMMON SERGEANT, supported the views of Mr. LAURIE, the COMMON SERGEANT honourably and sensibly stating that he was "at first "disposed to treat the proposition as most "absurd, but that subsequent inquiry, and "the rational arguments adduced that day, "had altered his impressions." The report in the newspaper adds that after some further discussion the PRESIDENT put the question, and on a division the numbers were:—For introducing billiards, &c., 20; against it 30; it was consequently lost by a majority of 10. Yet, after another long discussion, a proposition for purchasing a piano-forte and other musical instruments for the use of the patients, was carried, the numbers being 25 for, and 23 against it.

To parody the Duke of WELLINGTON's hint, we say to the thirty governors, "Pray, gen-"tlemen, place yourselves in the category of "men who do not meddle with questions "of which they are wholly ignorant." We could place on the table of the governors at least fifty pamphlets and reports containing accounts of amusements introduced into lunatic asylums, in every instance with great advantage to the inmates. But Mr. LAURIE has already found the valuable evidence of experience useless in the court. Prejudice is a monster without *ears*. Ignorance is its fellow, without *eyes*. The majority of governors at Bethlem have long been deaf and blind to good advice. Well might an inmate at Hanwell say the other day, "We are shut "up wrongfully. It is the insane who are "free." However, the point of the wedge of improvement has been got to stick in Bethlem's thick walls, and sooner or later it will be driven home.

While so near to the subject in one department, we may take the opportunity of alluding in this place to the "ASSOCIATION OF MEDICAL OFFICERS OF HOSPITALS FOR THE INSANE," notices of which have occasionally appeared in our columns, and which association very unostentatiously held its THIRD ANNUAL MEETING during the early part of this month, in London. Not, however, being at the time in possession of a written report of its proceedings, we were unable to speak of them earlier.

In effecting one object, that of acquiring information by inspecting the various asylums of the kingdom, the members have been most warmly aided by the governors and committees of the different asylums situated in and about London (as on former occasions they were assisted in the provinces), with *one exception only*. During the meeting in London, the governors of St. Luke's Hospital, and the visiting justices of the Middlesex, the Surrey, and the Kent county lunatic asylums, liberally invited the association to visit their respective establishments, and inspect them thoroughly, and, moreover, offered committee-rooms for the use of the members to meet and hold their conversaziones. They, also, on some occasions, even entertained the members substantially and most hospitably. The governors of the Royal Hospital of BETHLEM made the one exception to this, returning an unqualified refusal to the secretary's request that the association might visit Bethlem. This fact belongs to that peculiar class which requires no comment in making it publicly known. The refusal, however, accords with the usual proceedings in a public institution where there is something very wrong within doors to conceal.

Several memoirs were read at the meetings of the association, and we trust to have an opportunity of laying them before our readers.

The association will, in course of time, effect much good. The quiet and unassuming manner in which it has hitherto attempted to detect many errors which have encumbered the study of the phenomena of mind, and amend the pathology of mental disorders, indicates the exercise of good sense, and the possession of good intentions, in the inquiry. At least it will propagate no errors. Its list of members contains some of the most eminent names of this kingdom and the continents of Europe and America. Its avowed intentions, as published in its circular of July, 1841, are,—"To improve the condition and management "of lunatic asylums; to improve the treatment "of the insane; and to acquire a more ex-"tensive and correct knowledge of insanity." These propositions admit the existence of imperfections in the public lunatic asylums, of defects in the treatment of the insane, and of errors and deficiencies in our knowledge of the disease. The members of the

association, therefore, take high ground as reformers, for they begin where all reform should commence, viz., with themselves and the establishments under their direction. It is highly creditable to them as a body that whilst many of the members receive no remuneration for the services they render to their respective asylums (and none of those who are salaried officers are remunerated in proportion to their labour and loss of time), they are prosecuting these objects, for the benefit of society, at their own personal cost.

We are often asked for an editorial opinion on the subject of climate in relation to diseases of the lungs, and especially respecting that of Madeira, as a place of resort for invalids. Some recent remarks of a very intelligent and respectable writer with regard to the latter point induce us to take this opportunity of adverting to the whole question.

The influence of climate in removing chronic hepatic and pulmonary affections has, we conceive, been most unreasonably insisted on by many physicians, whose doctrine, inculcated in works as well as practice, has so infected various practitioners and persons who have had no other guides, that hundreds of patients with organic disease are now expatriated in the expectation of results which but slight reflection on the part of the medical adviser would at once pronounce to be unattainable, because the expedient is, in nine cases of ten, recommended at by far too late a period of the disease. Nevertheless, there are, without doubt, numerous cases, of *pulmonary* disease *especially*, in which sudden and great variations of temperature are particularly injurious, and which require, therefore, a removal of the patient to a climate possessing a nearly equable degree of warmth throughout the year, a clear dry atmosphere, and a general immunity from malaria, hot or cold winds, and inordinate electric influences. Much as fashion and false impressions have conduced to populate Montpellier, Rome, Naples, &c., with English invalids, it is now pretty well acknowledged that these resorts for the *dolce far niente* throughout the Mediterranean are, owing to the prevalence of noxious and piercing winds, quite undeserving of their reputation as respects climate. Indeed, excepting Cadiz (where the mean heat of summer and winter are, respectively, 52°.90 and 70°.43 Fahr., varying only 17.53 degrees) there are no towns on the continent of Europe that will bear to be compared with our own Torquay, Dawlish, and Penzance*, in either of which the subject of incipient phthisis may meet with a very fair chance either of complete recovery or, at any rate, an alleviation of the symptoms. To those, however, for whom a greater degree of warmth is an absolute requisite, and who are not deterred by the enormous outlay and a painful separation from kindred, as well as by the prospect of that dreamy, listless existence which is so hateful to the active-minded native of England, we would at once recommend Madeira, respecting which we shall, in addition to our own observations, present some that are derived partly from the experience of Dr. A. Combe, a professional visitor now living on the island, and partly from private sources. But let it be recollected that we wholly repudiate the *morality* of holding out hopes to those almost lungless beings, hundreds of whom have gone out to Madeira only to become objects of ridicule to the boatmen, who, on landing, are wont to exclaim, "La vai mais hum Inglez a l'aranjeira." *There goes one more Englishman to the orange-grove*—the English cemetery.

The climate of Madeira, though by no means free from the vicissitudes with which other regions are visited in a much severer degree, is so far superior to that which prevails along the shores of the Mediterranean, that in the spring months (those that are

* We refer our readers on this subject to two works in which the climates of these places are discussed with ability, namely, Blewitt's Panorama of Torquay, and Dr. Forbes on the Climate of Penzance.

most trying to dyspeptic and pulmonary subjects) the island is scarcely ever affected by the cold, dry, penetrating, east or north winds, which are productive, not only of great discomfort, but of considerable danger to incautious invalids. "After "having myself," says Dr. COMBE, "spent "three winters in Italy and the south of "France, as an invalid, I have no hesitation "in affirming that the winter just ended here "(April 1843), bad as it is said to have "been, by all who have resided some years "on the island, was, with all its imperfec- "tions, incomparably superior to the best "of the three that I spent in the south of "Europe, in the great requisites of mildness, "equability, and general fitness for the "pulmonary invalid." In order to give some idea of the winter climate at and about Funchal (the usual and best residence for the invalids), it may be useful to subjoin the results of observations taken from an out-of-doors Fahrenheit thermometer, during the four last winter months (1842-3), which are said to have been more than usually cold and disagreeable

		MAX.	MIN.	MEAN.	GENERAL OBSERVATIONS.
December,	7, a.m.	67°	50°	58°	Cold and damp to the feelings. Snow on the mountains. Wind N.W.
	1, p.m.	72°	62°	67°	
January,	7, a.m.	63°	51°	57°	Cold, as before, with occasional warm days. Wind W. and S.W.
	1, p.m.	71°	60°	66°	
February,	7, a.m.	61°	44°	55°	Frequent and heavy rains, with occasional thunder. Gales from S.W.
	1, p.m.	72°	53°	65°	
March	7, a.m.	64°	53°	60°	Cold and rainy. Boisterous winds from W. and S. W.
	1, p.m.	75°	64°	69°	

On the setting in of cold weather, it is true, all persons resident in Madeira suffer more or less from catarrhs and diarrhœas, when, judging from the thermometer, we should pronounce them all to be a set of discontented grumblers, and these evils are not a little increased by the foolish practice of "braving the cold"—(a pretty practice for invalids!)—and persisting in the use of light summer dresses long after the sensations have suggested the desirableness of warmer clothing. Practically, however, the reader may form a tolerably correct notion of a Madeiran winter when he is told that during the four months above mentioned there were only four entire days in which the weather confined persons to the house, and that at all times the heat is too great to allow of the use of a great-coat in walking. *Within doors* the painful sensation of cold that is so common at Naples and Rome, is scarcely ever experienced there (the most usual chamber-temperature being from 64° to 68°), and, out-of-doors, very gentle exercise will keep up a genial warmth, even on the coldest days. "Indeed, with a few "exceptions," says Dr. COMBE, "the "general weather between December and "April last, reminds me greatly of a *good*, "not a *hot*, summer at home, with more of "sunshine, and a purer, softer, air. If such "be the character of a bad winter, let it be "imagined what will be a good winter in "Madeira." But in point of fact, the climate in average years is still milder, for the observations of fourteen years give a mean temperature, for January, February, and March, of 62°; and for December and April, of 64°, while the average temperature of the whole year is 66°.68.

These remarks (which fully confirm the previous medical testimonies of GOURLAY, HEINEKEN, RENTON, and WILDE), refer to the winter climate, which is at least 23° warmer than that of London, and nearly 17° warmer than the winter of Penzance. The equability of the temperature is sufficiently indicated by the fact, that the summer heat is only 8° higher than that of London, and the warmth is so moderated by N. E. wind

and regular land and sea breezes, that a Madeiran summer is, on the whole, less oppressive than a warm one in England. The mean daily range of the thermometer is about 9°, and the annual range does not exceed 15°; whereas at Rome and Naples it is nearly 30°.

With such peculiar qualities the climate of Madeira cannot fail to be beneficial to such individuals as are sent there by *judicious* professional advisers. But let our medical friends recollect the following important directions given by the late Dr. HAWKINS, which cannot be too often repeated:—1. That the change of climate, when necessary, should be made at the *earliest possible* stage of the disease; 2. That a *prolonged* stay, not merely of a few months, but of two or three years, is necessary for complete recovery and security; and 3. That the climate *alone* is insufficient without great care against colds and constant attention to medical and dietetic treatment. Great numbers of pulmonary visitors are lost through want of common care, while others too hastily return only to lay their bones in an English churchyard.

On the first arrival in Funchal Roads the south side of Madeira has a barren, naked aspect, and after having heard so much of its luxuriant vegetation and fertility, one is disappointed at the scarcity, the almost entire absence, of trees on that side of the island, which differs remarkably from the northern side, where beautiful and romantic scenery is a striking characteristic. Funchal, however, is the principal abode of the English population, and its warm and sheltered position makes it peculiarly advantageous to invalids who cannot bear the colder and more exposed situation of the *quintas* up the mountains; besides which, the society of the town, and the urbane attentions of the merchants, have no small tendency to dispel *ennui*. Owing to the steepness and terraced nature of the unnecessarily bad roads that are cut along the face of its volcanic crags, travelling is generally performed on horseback, although in some cases palanquins are used by invalids. House-rents and servants' wages are high; the common necessaries of life cheap and good. Fruit is abundant and in great variety, but greatly inferior in quality to that of Portugal, no doubt because the natives neglect every other fruit for the culture of the vine. Even the wine trade, however, is deplorably on the decline, and the exports at present scarcely exceed six thousand pipes a year, of which about fifteen hundred come to England, while the chief part of the remainder is sent to the West Indies and the United States. The pure old *south-side* dry wine is an excellent tonic for those who require wine; but besides this and the Malmsey there are several other kinds, among which the *Sercial* ranks high as a good substitute for Hock, and *Tinta* supplies the place of Burgundy or Port. The natives live on miserably insufficient diet, with scarcely any fresh meat, the consequences of which are quite apparent in the pallid and blotched countenances and the emaciated forms of the peasantry, amongst whom cutaneous complaints in their more inveterate forms, especially elephantasis and scrofula, bowel inflammations and dysentery, as well as rickets and spinal deformity, prevail to a frightful extent. The mortality among children, also, is extraordinarily high.

We may add, by way of conclusion, that invalids will do well not to attempt making the voyage before the month of June, nor later than that of September, the summer not being well set in until *July*, and October being the first month of the autumnal rains. Let it be remembered, also, that however easy it may be to get out to Madeira, the opportunities for returning are "few and far between;" and of this fact the invalid should be made fully aware ere the trip is undertaken.

M. RACIBORSKI asserts that the milk of nurses who menstruate while suckling does not differ from that of other nurses, except in containing less cream.

Lectures on the Eruptive Fevers, delivered at St. Thomas's Hospital in January, 1843. By GEORGE GREGORY, M.D. London: Renshaw. 8vo. pp. 258.

IN the preface to this work the author states that these lectures, delivered between the 18th January and the 8th February, 1843, were intended to convey to his hearers a knowledge of the experience which he had acquired during twenty years of official connection with the Small-pox and Vaccination Hospital, and that "his sole reason for committing them to the press is a hope that they may prove useful as a picture of modern as contrasted with ancient pathology, and to amalgamate with established theory and practice the searching but faithful results of statistical science." The arrangement of diseases which the author adopts prevents all prospect of his expectation being fulfilled, for the picture which it constitutes looks, in its heavy, cumbrous frame, more like a bargain transferred from an ancient pathology shop, than the refined production of modern skill. But we take the reader into consultation, and let the author speak for himself:—

"The skin may be considered as the fourth in the series of important organs. First come those of the encephalon, then those of the chest, then the abdominal organs, and lastly, the superficies. This portion of our frame, the superficies, is subject to various diseases originating from internal and obscure causes. They are,

"1. The acute febrile affections bringing life into hazard. We call them the exanthemata, from the Greek *ανθος*, a flower. Hence, *εξανθεω*, to bud forth or efflouresce. Of these greater exanthemata there are four, small-pox, measles, scarlet fever, and erysipelas.

"2. The acute febrile affections not bringing life into hazard, the lesser exanthemata. They are divisible into two sections, 1. Vesicular affections, of which there are four, vaccinia, varicella, herpes, and miliaria. 2. The simple efflorescences not leading to fluid effusion, of which there are also four, namely, lichen, urticaria, roseola, and erythema. These twelve forms of eruptive fever will constitute the subjects of the present series of lectures.

"3. The chronic cutaneous affections of a mild or benignant character, formerly characterised as being *boni moris*, such as lepra, psoriasis, ichthyosis, impetigo, elephantiasis, and molluscum.

"4. Chronic cutaneous affections, *mali moris*, bearing a malignant character, such as cancer, lupus, and fungus hæmatodes. Complaints of this latter kind are exclusively surgical. The physician is consulted in all the others."

Now, we certainly feel surprised at finding an author possessing the experience of Dr. Gregory, giving forth as the result of "twenty years' official connection with a public hospital" so clumsy and unscientific an arrangement of cutaneous diseases as that above quoted. We are less surprised, however, at another feature in the affair. The lion—rather a magnificent animal, though, to compare with Dr. Gregory—has been "dividing the spoil," and not forgotten his own share. With facetious gravity he hands the complaints of a malignant character, *mali moris*, to the surgeons, while he reserves all the rest, *boni moris*, for his own class. Such is the award made by the worthy *doctor* to his brother practitioners in general practice,—a pretty award truly from a lecturer in a regenerated and regenerating school, the opponent of monopoly, as the doctor and his colleagues would have their newly polished establishment considered to be. It would be interesting to surgeons of the present day to learn from this antiquarian doctor a piece of information which, thank Heaven, in practice is unknown to them, namely, what are the ancient distinctions of diseases that used to be denominated *medical* and *surgical*,—which are the surgical diseases that require no internal (medical) treatment; which are the diseases of the skin that call for no external (surgical) treatment? Is medicine less medical because it needs the use of the hands? Or is the human mind so narrow that it can embrace only a fragment of the knowledge of medical science? Poob, *doctor*. Abandon all that musty nonsense. Not only does it beget a charge of folly against its cherishers; occasionally it brings them into the direst disgrace. In *practice* it led a president of a College of Physicians to leave his bosom friend to die in the road like a vagabond.

Dr. Gregory, in his first lecture, adverts to a subject which has excited much interest within the last few years, and will create more as it is better understood, namely, the question of *vicarious mortality;* that is, the *relative mortality* of certain fatal diseases, considered with *reference to each other* during a succession of years. Thus,

"In 1838, small-pox was the great epidemic in London, as in the country. In 1839, measles and scarlet fever were both on the increase, while small-pox had sunk from 3817 cases to 634. In 1840, scarlet fever pre-

dominated. In 1841, hooping-cough doubled its numbers, and shot above all the rest; while scarlet fever sank to the low point which small-pox had reached in 1839. The year 1842 has been remarkable for the extreme infrequency of small-pox, one death only throughout this great metropolis being attributed to it for each day of the year; and secondly, for the uniform rate of mortality occasioned by its three great rivals."

Dr. Gregory opposes the commonly prevailing opinion of the existence of fever previously to the appearance of eruption in the exanthemata, and ridicules the idea of the existence of the fever independently of the eruption, a kind of relation which he terms an "Irish mode of undergoing small-pox." His reasoning on this subject is far from altering our opinion, which we admit to favour, in this instance, the old school. He says:—

"The doctrine that I teach you, however, is that exanthema may take place without fever, that the febrile state is not essential to the development of the exanthem. For observe, cow-pox, varicella, inoculated small-pox, and the mildest type of scarlatina, frequently display themselves without initiatory, without eruptive, nay, even without maturative fever."

After such an assumption as this, what means the doctor by the term *fever*? He cannot doubt that the contagious poison received into the animal organism causes an excitation of the nervous and vascular systems. Now, it is this excitation which we denominate *fever*, and which necessarily precedes every disorder originating in the reception of a morbid poison. It is in the nature of animal operations that the excitation, or fever, shall differ in degree, but it can never be wholly absent. Again, it is a well-established fact that to ensure the regular course of any disease, the various pathological actions should be properly balanced; that, for example, if the vital force be expended on the febrile actions, the eruption will be less perfectly developed, or, to use the words of the author, "any tumultuous febrile action disturbs the regular progress of an exanthem." But, in admitting this much, we cannot agree with Dr. Gregory that fever is unnecessary to the production of the exanthem, and injurious to its development; and that the idea of fever existing independently of exanthem is inadmissible.

In the practical portions of the work the author proves himself to be a better physician, and in these is always judicious, and frequently excellent in his precepts, as the following quotations serve to show:—

"The principles which are to guide you in the general management of the eruptive fevers fall next to be considered. The exanthemata cannot be cut short. Common fever accidentally arising may be cut short by blood-letting, by an emetic, or a brisk purgative; nay, sometimes by the cold affusion; but an exanthema cannot. It has been six, eight, or twelve days breeding. It must run its course. You cannot reasonably indulge the hope of preventing or even moderating eruption either on the skin or throat by active measures in the early stages of small-pox or scarlet fever. The legitimate objects of treatment at this period are to lessen inordinate constitutional tumult, to subdue plethora, to check accidental congestions and complications. These are much more likely to occur when the heart and arteries are overloaded with blood and urged to inordinate exertion, than when the mass of blood is in a pure and healthy condition. Always remember, too, when you bleed early in an eruptive fever, that the disease has a long course to run, and be moderate in your demands on the system."

"You perceive, then, that the great objects of treatment in these disorders are less directed to the specific malady than to those congestions, and superadded affections by which the steady march of the exanthem is impeded. Hundreds of cases, whether of small-pox, measles, or scarlatina, may be safely conducted to a close without a grain of medicine. And why? Because the febrile action or zymotic process in such cases goes on quickly, being neither too violent on the one hand, nor on the other deficient in the necessary power. To give active medicines here is hurtful. It deranges nature. But the case is different when the febrile commotion or effervescence is inordinately violent, as when small pox is ushered in with phrenitis, measles with epistaxis, scarlatina with excessive angina. Purgatives, leeches, cold lotions, bleeding from the arm, may then be required."

The first and second lectures relate to the general principles which are applicable to eruptive fevers, while small-pox, measles, and scarlatina, engage half of the volume. One lecture is on erysipelas, two are devoted to vaccinia and vaccination, and the remaining two to varicella, herpes, miliaria, lichen, urticaria, roseola, and erythema. The latter diseases scarcely meet with the attention that they deserve, while small-pox is discussed copiously. Respecting the morbid anatomy of small-pox, the author observes,—

"The appearances on dissection peculiar to small-pox are confined to those which the

larynx and trachea exhibit. The lungs, indeed, sometimes display the usual evidences of inflammation, vascular engorgement, purulent infiltration, and hepatisation. The thorax of one side may be found replete with a sero-purulent fluid (resembling a mixture of cream and water) the result of acute pleurisy, and the pleura itself may be seen injected with blood, and covered with a dense layer of coagulable lymph; but all this occurs equally in other diseases. The condition of the larynx and trachea, however, in small-pox *on the eighth day*, is unique. The mucous membrane, if then inspected, appears covered with a copious, viscid, puriform secretion, of a grey or brownish colour. On detaching this, the membrane itself is seen deeply congested with blood, thickened, pulpy, and in the worst cases black and sloughy, exhaling a most offensive odour. These appearances may be noticed to the third division of the bronchial tubes."

Of the old fashioned notions of the doctor the following is an apt specimen:—

"The cause of desquamation is the intense heat of *skin*, which *dries up* and *kills* the minute fibrils connecting the cuticle with the corion."

Throughout the lectures Dr. Gregory introduces numerous statistical tables, most of which are derived from the admirable labours of Mr. Farr. The deductions from these tables is oftentimes of high importance, for we learn that

"Measles is undoubtedly increasing in severity, if not in quantity, in this country. In 1748 only ten deaths, and in 1754 only twelve are recorded in the bills of mortality as having arisen from measles; whereas the weekly average of the last four years is thirty, and the annual average 1560."

Again, "the extent and severity of scarlet fever at the present time are such as to demand from you the most patient attention and diligent study. It is obviously an increasing malady, and seems likely in after-times to occupy that painful pre-eminence among the fatal diseases of early life which small-pox formerly enjoyed."

The importance of the following remarks on the contagion of erysipelas will be at once perceived. "I am persuaded," says the author,—

"1st, that erysipelas may commence in an hospital without the suspicion of importation; 2ndly, that being so generated from what, until we get a better name, I will call *hospital miasm*, it may spread by contagion; 3rdly, that the miasm generating erysipelas is identical with that which, in lying-in hospitals, generates puerperal peritonitis, which in foundling hospitals and workhouse nurseries gives rise to pudendal gangrene and umbilical ulceration—which in army hospitals generates hospital gangrene—which in hospitals differently circumstanced is found to occasion a malignant form of cellular cynanche, and sometimes the most aggravated type of typhus gravior."

We shall probably make some further extracts from these lectures, but in taking leave of the volume at present, we may add that we have found in it sufficient to induce us to recommend the lectures to our readers as productions of high practical value, and deserving of careful perusal. In their collected form, as a volume, the work was wanted. Of all the books with which the press in recent times has teemed, not one has been specially devoted to the eruptive fevers. Systematic treatises on medicine have, it is true, treated of these diseases in connection, but, necessarily, in a compendious manner, and the individual maladies which constitute the group have, from time to time, been well described in monographs. If, however, we except the work on "Morbid Poisons" by Dr. Williams, the student will search in vain for any volume that is worthy of being termed a complete exposition of the exanthemata. The subject was, therefore, open to some author who was prepared with the all-important qualification of practical experience.

A Practical Treatise on Pulmonary Consumption, its Pathology, Diagnosis, and Treatment, &c. By FRANCIS COOK, M.D., M.R.C.S.E., Physician to the Louth General Dispensary. London: Churchill. Post 8vo. pp. 120. 1842.

THIS work has had many predecessors, or it might have stood a better chance of fame in the medical world. It chiefly contains a satisfactory exposition of the causes, progress, and physical signs of phthisis, together with some useful, if not original, suggestions on the treatment of consumptive patients. In discussing the causes of consumption Dr. Cook advocates the humoral pathology. He says:—

"We must seek for the primary cause of tubercle in the morbid alterations which the circulating fluid undergoes. . . . It is impossible to suppose that a fluid which is constantly undergoing change should be exempt from morbid alterations of quality. The symptoms which these alterations excite are, in our ignorance of their essential nature, referred to the organs in which they are principally manifested, and in this man-

ner changes in the fluids have been neglected, and all diseases improperly referred to disordered action of the solids."

The circumstances indicative of pulmonary tubercle are briefly pointed out, the signs whereby to recognise the disease being divested of accompanying and merely collateral signs, having nothing to do with the essential morbid conditions in pulmonary phthisis, but with which the diagnosis of this complaint has been often needlessly encumbered. Among other symptoms, Dr. Cook lays stress upon the shortening of the inspiratory act, and the proportionate lengthening of expiration. Thus, he says that if in health the duration of the inspiratory murmur be represented by 10, that of the expiratory will be equal to 2; while when the lungs are occupied with tubercles the inspiratory murmur is shortened from 10 to 4, or even 2, and the expiratory prolonged in duration from 2 to 10, or even 20, and both measures are attended with a rough grating sound. The various stethoscopic sounds from the chest are traced through the successive stages of the disease, the general *resumé* of these being as follows:—

"The pulmonary crumpling sound is first detected, followed by the dry crepitous râle; inspiration is increased in intensity and diminished in duration, while expiration is increased both in intensity and duration. The dry crepitous râle gradually becomes humid, and is succeeded by the large mucous, cavernulous, and, lastly, by the cavernous gurgling, or *râle de gargouillement*."

The above passage affords a specimen of the author's style, in tracing the history of phthisis, his clearness and brevity being great virtues in these days of book-making. Dr. Cook takes an opportunity of reprehending the modern system of education in the middle classes, as among the most fertile predisponents to consumption:—

"The youth of the wealthier classes are subjected to confinement that is little less injurious to the constitution than the factory labour of the poorer. The delicate, narrow-chested girl, whom every comfort and home indulgence would be scarce sufficient to raise to a healthy womanhood, is sent to a London school, where the powers of the mind and body are equally overtasked. The day being scarcely long enough for the numerous accomplishments which are taught, the periods allotted to rest, meals, or exercise, are consequently abridged to afford facilities for their acquisition. We cannot be surprised that failure of the vital energies and obstruction of the periodical functions follow a continuance of this discipline; but we must wonder at the blindness of those who, when home comforts fail to restore the sinking invalid, and slow hectic carries off its victim, confidently attribute this event to latent tubercle, or to some other equally imaginary cause, rather than to the confinement required by the faulty system of modern education, which has sapped the foundations of life at a time when the constitution required every assistance for its development."

In similar strains he condemns, as others have done before him, the practice of sending patients in an advanced stage of pulmonary consumption abroad, to die amongst strangers and foreign scenes,* while the coasts of Sussex, Hampshire, Dorset, Devon, and Cornwall, afford an abundance of sheltered retreats, equally suited in climate to the patient, who may thus continue surrounded by the solaces of home. The relative merits of some of these, and of the more distant places of resort for consumptive patients, are canvassed by Dr. Cook, who adds a table of the average yearly condition of the atmosphere in a number of them, in an appendix.

Among the exciting causes of consumption the author enumerates *contagion*, in which he surmises that he will probably not be joined by many persons. But, says Andral, "I have more than once, in the course of my practice, been struck with the fact, that women have presented the first symptoms of phthisis shortly after the death of their husbands from the disease." And we have ourselves known a case in which tubercles were present in the lungs, without these being readily traceable to any other source, and in which case, also, the patient not being, apparently, predisposed to the disease constitutionally, the symptoms were dissipated. We may here add that Dr. Cook is one of those practitioners who believe that phthisis is curable, both spontaneously and by art.

In the treatment of consumption, Dr. Cook, in addition to hygienic and dietetic measures, variously recommends sedatives,

* We say nothing here of the injudiciousness of the places to which consumptive patients are sent—the south of France, infested by the cutting *bise*, a furious north wind; Pisa surrounded by marshes; Rome environed by the unwholesome campagna; Malta and Madeira, neither of which is reached without a long and distressing voyage.

saline medicines, the inhalation of iodine vapour, and, pre-eminently iron. Having mentioned the latter medicine, we are induced to remark how frequently authors in one portion of a work contradict something that has been said in another portion of it. Dr. Cook says, at page 98, "It appears highly probable, from some experiments made by Coster on the lower animals, that, in addition to its anti-hectic properties in consumption, iron posseses a *specific* or peculiar power of counteracting the tuberculous diathesis." At page 63 he, as may be judged from the tenor of his remarks, has denied the *specific* properties of all medicinal agents. At page 81 he unconditionally praises Madeira as a place of residence for consumptive invalids, although no farther back than page 77 he had said, "It is now generally acknowledged that a residence on the coast is rather prejudicial than productive of benefit in consumption." Fault is not to be found with Dr. Cook for recommending an insular residence, such as Madeira, for consumptive invalids; for experience tends to show that a maritime situation has proved highly beneficial to phthisical patients who have been induced to walk daily on a beach, close to the sea, inhaling the air as it comes from off the waves. On a *primâ facie* view, indeed, such a course ought to be attended with the best results, if iodine (as such air must be charged with) exert a salutary effect in promoting the absorption of tuberculous matter. Neither do we quarrel with Dr. Cook for his advocacy of iron; for probably great benefit may accrue from the union of the two remedies, in the *proto-iodide of iron* which has lately been used on the continent, with decisive success, against phthisis. For a peculiar method of employing iodine in consumption we may refer the reader to Mr. Flood's "Exposition of the Pathology and Treatment of Tubercular Phthisis," reviewed in the last volume of this Journal, page 688; meanwhile to those persons who are fond of examining the *last* works on particular subjects in preference to any others, the work of Dr. Cook may be presented as a correct synopsis of modern information in relation to the disease to which it is devoted.

M. Ricord supposes that the exudation of blood occurring after cauterisation of the os tincæ has deceived individuals into the belief that applications of nitrate of silver promote or restore menstruation.

TREATMENT BY COLD WATER.

To the Editor of The Lancet.

Sir,—You have published from time to time various severe strictures upon the method of treating disease by the combined operation of sweating and the several applications of cold water; and you have given insertion to absurd letters, many of them mere quack advertisements of their own cures, from correspondents respecting this system. Dr. Dick, and other chirping critics, have been permitted, through your columns, to obtrude their ignorant impertinence upon the public; and sundry anonymous scribblers have been favoured with a similar opportunity of appearing in print through the same gratuitous channel.

The effect of this has been that the public has become more and more prejudiced *in favour* of the very system which has been opposed in so injudicious a manner. We see hydropathic institutions springing up in all directions, and publications on the subject bidding fair to rival those on quicksilver, saltpetre, or any other esteemed drug.

Now, if you wish the merits of hydropathy really to be canvassed, and its medicinal effects to be accurately ascertained, the course which I would suggest as the best is that you should, on your own authority, and with proper brevity and clearness, state what you consider to be the objections to which it is liable, whether practical or theoretical. Water practitioners will then see what is actually advanced against their doctrine, and no doubt they will readily furnish a reply to your remarks. I, for one of the humblest and most sincere among them, hereby offer, and pledge myself, to refute, with all possible conclusiveness, whatever you can produce to this effect, whether it regards the principles on which hydropathy is grounded, or the practical effects it has produced. I am, Sir, your obedient servant,

Jas. Freeman, M.D.

Sherborne-House, Cheltenham,
July 4, 1843.

*** Of Dr. Freeman we know nothing but that his name closes the above letter. Whatever we may say, therefore, on this occasion can have no personal application to that gentleman, although we must confess that if our judgment were called for upon him, individually, we could find some evidence of his fitness to speak to facts, in his declaration that "hydropathy" has thriven in proportion as it has been condemned. Or else we might regard him as a sorry blunderer for supposing the necessary consequence of *notoriety* and *curiosity* to be the result of well-tempered feeling and wisdom.

England is the paradise of quacks, where whoever cries very loudly will have plenty of followers—*for a time*. Priessnitz at one period had more than a thousand patients in his hotel; *now* the number is three-quarters less. But what we have to say respecting the cold-water scheme must be said at once. HYDROPATHY, then, seems to be THE FORLORN HOPE OF DOCTORS OUT AT ELBOWS.

As for accepting challenges to fight the question, we should as soon think of fencing Baron DUPOTET, or Mr. MORISON, or Mr. HOLLOWAY, or OLD PARR, with his life pills. We are not at war with water,—for that healthful beverage and bathing are as old as the hills and the rivers,—but with the quacks who gull the public, and them we destroy without fighting.

TREATMENT OF GONORRHŒA.

To the Editor of THE LANCET.

SIR,—I am well aware that almost every medical gentleman has some mode of treating gonorrhœa which he naturally supposes is a more sure remedy than any other; yet I dare say he often finds his medicines fail; but when this is the case I doubt not he attributes the failure to anything but the just one—the insufficiency of his treatment. Under these circumstances I do not feel reluctant to present to you a mode of treatment that I can fully rely upon as *generally* successful as regards a simple gonorrhœa.

Advise the patient to abstain from all fermented and spirituous liquors; yet this is rarely urged on the patient, as it may lead to suspicion, but it is the duty of a surgeon, nevertheless, to insist upon a "teetotal" diet for at least three or four weeks.

Keep the bowels regular once or twice a day with some saline aperient, and apply round the glans, continually, by means of a slip of lint, a lotion as follows:—

℞ *Solution of acetate of lead*, forty minims to one drachm;
Tincture of opium, two drachms;
Rose-water, three ounces. Mix.

And inject once every four or six hours some of the following:—

℞ *Solution of acetate of lead*, half a drachm;
Wine of opium, two drachms;
Orange flower-water, two ounces and a half. Mix.

I have followed this mode of treatment in fourteen *successive* cases with the best results. That injections of a proper strength produce hernia humoralis, or stricture, is too absurd for further notice.

But I may add, that the violent scalding during making water arises *much* from the great *acidity* of the urine. Sesquicarbonate of soda and liquor potassæ, given every four hours, will remove this. *The most horrid torture in making water has disappeared with this treatment.* I am, Sir, your obedient servant,

July 3, 1843. J. R. C.

SEA-SICKNESS.

To the Editor.—Sir: On a recent aquatic excursion I was, as usual, very sick. I tried brandy, soda-water, coffee, &c., without the slightest benefit. A lady on board was using brandy and salt for some purpose which I did not inquire about, but by mistake she put the salt (a teaspoonful) into a wineglass about half full of vinegar. This I mistook for my brandy, which was by its side, and swallowed. In a few minutes I was delighted to find the sickness much abated, and on taking a second dose was perfectly relieved, having soon afterwards a good appetite, and feeling not the slightest nausea after eating a hearty dinner and drinking two glasses of sherry. I recommended the same remedy to a gentleman who was also very sick. It did not so completely restore him as it had done me, but he told me that although he had made many voyages, was always sick, and had tried everything that is usually recommended, he had never experienced so much benefit as from the vinegar and salt. I have no opportunity of giving it a more extensive trial, but hope that some of the readers of THE LANCET will give us the result of further experience, with information as to whether either the salt or the vinegar, taken singly, will have the same effect. Yours,

A FRESHWATER SAILOR.

July 6, 1843.

OPHTHALMIA AND SUDDEN BLINDNESS.

A RIDDLE IN MEDICINE.

A VINE-DRESSER of Sauterne, aged 33, had, for three days, felt a slight inflammation in the conjunctiva of the left eye, but of scarcely enough annoyance to require him to seek medical advice. On the evening of the third day he went to bed as usual and slept soundly until five o'clock the next morning, when, on awaking, he found himself quite blind on that side! On being examined, three days afterwards, the eyelids were found much swollen and the conjunctiva greatly injected; there was chemosis; the cornea had lost its transparency, and pus existed between its layers, as well as in the anterior chamber, mixed with the aqueous humour. The iris looked "like a dead leaf," and, in fact, all the membranes and humours of the eye, *totius substantiæ*, were in the most inexplicable condition. The patient suffered little or no pain. He is stated to have never been the subject of

a venereal disease, nor even a blennorrhœa; yet, in the course of a single night he is seen to exhibit all the effects which a blennorrhœal ophthalmia of the most acute and painful character requires the lapse of two or three days to produce.

What ought to be the treatment in this case? for no subsequent details respecting it have yet reached us. Here, then, is something to puzzle the brains of those who choose to care for it, until we learn more on the subject, which we promise our readers shall be laid before them.

One practitioner who was consulted recommended a most vigorous antiphlogistic treatment: general and local bleedings, leeches to the anus, a large blister to the back of the neck, frequent applications of belladonna and mercurial ointment to the globe of the eye, aloetic purges, &c., to prevent any possible development of violent inflammatory symptoms. Another practitioner (M. Cazenave) proposed to puncture the cornea and let out the pus contained in the anterior chamber, &c.

M. Chabrely, who reports the above case, cites another in his own practice, the subject of which was a child fifteen months old. She had purulent ophthalmia; the eyelids were so swollen that they could not be drawn apart, and the purulent matter formed was discharged at either angle of the eye. The chemosis was extensive. M. Chabrely arrested the disease, however, before the cornea had become affected, by means of a collyrium composed of one part of chloride of sodium to one hundred and fifty parts of distilled water. The use of this remedy is said to have procured the convalescence of the patient in four days.—*L'Experience*, Jan. 5th.

THE FREE-AND-EASY STYLE.

The greatest attainments in medical science will not of themselves compensate for the due reserve and decorum which characterise the gentleman in any walk of life, but which is supereminently demanded from members of such a profession as that of medicine. A case in point is afforded by the following anecdote, which, if not true, at least deserves to be so:—A certain physician in Paris, who also filled a professor's chair, having found practice coming to him but slowly, and remarking at the same time that other physicians who were in good practice, were on familiar terms with some of their female patients, suddenly conceived that he had discovered in the latter circumstance the secret of his rivals' success, and resolved to adopt the marks of intimacy on the first fitting occasion. An occasion arrived. He was sent for by a lady of respectability, whom we shall call *Madame Quelq'une*, of the *Rue Joubert*, No. 1000. Having been announced, he walked boldly into the room, and taking his patient by the chin, exclaimed, "Well my dear! and how are you to-day?" The astonished lady promptly replied, "I am very well, Sir, as I will prove to you;" and thereupon rising and ringing the bell, she said to the servant who appeared, "Pay this physician his fees for two visits, but recollect that when he calls again, I am not at home!" The chopfallen physician left the *Rue Joubert* with a rueful countenance. But the worst was behind. The lady sent for another physician, who was both a gentleman and a witty man, and who, oddly enough, had been a pupil of the professor. After various inquiries, the new medical attendant found it necessary to percuss the chest, an operation which the lady readily permitted, warning her medical adviser at the outset, however, that there was one region, the exploration of which she could by no means permit. Day after day the physician continued his visits, each day he percussed, and he was as constantly reminded of the prohibition. At length his curiosity having been raised quite on tip-toe, he ventured respectfully to inquire which *was* the interdicted region, and to his great surprise learned that it was *the chin*. The patient, who had long been bursting with the secret, now recounted to her Æsculapius the adventure and mishap of his predecessor, and the pupil resolved at some time to read a lesson to his *ci-devant* master. The opportunity very speedily arrived. As he was returning homeward—on foot—he met, surrounded by a posse of pupils, his old preceptor, who, having just left his professorial chair, was about to enter his cabriolet. The professor, thinking this a capital opportunity to inculcate an useful principle into those around him (and perhaps also to show the authority wielded by a physician who kept his cabriolet over one who was obliged to walk), thus addressed his former disciple:—"My dear ———, you seem to have quite forgotten me, and what you owe to my instructions; you never call me in to a consultation!" "Well," said the other, hesitating for an instant, "I recollect. To-morrow, at two o'clock, there is to be a consultation, at which I shall be happy if you will assist." "Come, that's hearty!" said the professor, shaking him by the hand, "I begin, after all, to think that you have have not quite forgotten your duty. But I had forgotten (he added, as just about to step into his vehicle) to ask where the consultation is to be held." "At *Madame Quelq'une*, *Rue Joubert*, No. 1000." The professor vaulted into his cab as if impelled by a rocket, cloaked himself up in a moment, put the horse at the top of his speed, and was off like a shot, next day quite *forgetting* the consultation,—so says the *Gazette des Hôpitaux*.

NEWS OF THE WEEK.

THE French journal, "L'Experience," advocates strongly the project which has been lately entertained of founding an HOSPITAL FOR CONVALESCENTS outside of the barriers at Paris, to accommodate not only the patients discharged from the other hospitals, but not yet in a condition to resume their ordinary occupations, but chlorotic individuals, and those who are affected with chronic complaints, who compose, generally, two-thirds of the inmates of an hospital, to the exclusion of more fit objects. The funds of the other Parisian hospitals, and the health and permanent recovery of the patients, would be equally benefited by the carrying out of such a measure; and the faubourg Poissoniere is spoken of as the situation in which the new establishment would probably be placed. It may naturally be inquired whether similar institutions are not called for in Middlesex. They are not, however, to so great an extent, especially as in English cities there are no barriers, as in Paris, &c., within which articles of provision pay a duty that materially enhances their price.

A Translation of Simon's "Medical Chemistry" will be shortly published, with notes, by Mr. GEORGE E. DAY, M.A., L.M., Cantab. The work is one of considerable importance at the present moment.

COMPLAINT is made on behalf of the MEDICAL STAFF OF THE ARMY, that its members are not dressed in rich clothes like those of the officers of the sword. The former have no facings, lace, or embroidery on their coats. The cloth is red, and the shoulders are ornamented with epaulettes; but the medical cocked hat has no feather, nor even a button upon it, and the whole attire is so plain, that the army doctor is charged with skulking behind on gala days to hide his simplicity. The only other military functionary who wears a red coat without facings or lace is the provost-marshal, a coincidence that is not very flattering to the doctor, who, if he be ranked according to his attire,—the rule with other officers of the army,—is below them all, for the provost-marshals are allowed, in addition, to wear laced tassels on the cocked hat, and a sash round the waist. Black velvet cuffs and collar, and a black feather, are proposed for the surgeons, with a respectable quantity of gold lace, both on the coat and down the trousers, and a sash to complete.

THE following curious case of NUISANCE has lately fallen under the decision of the civil court for the French metropolitan department of the Seine. A functionary of that court had hired apartments in the house of a certain M. ROQUE, in a certain square. The rooms he occupied composed what is called the first floor, though an *entresol*, or low-pitched suite of rooms, intervened between these and the ground-floor. When the "functionary" entered on his occupancy the rest of the house was inhabited, mostly by persons in trade; but of late the *entresol* had been let to a midwife, who, determined at all hazards to become famous, had had placed in front of the house a large and gaily-painted board, announcing "a lying-in establishment at forty shillings (*quarante francs*) a head." This very conspicuous advertisement not only perfectly succeeded in attracting the attention of passers-by, but was particularly disagreeable to the "functionary" and his family, for no lady could be seen at the windows of the first floor without being supposed to be an inmate of the lying-in establishment. An action for nuisance was therefore brought against the proprietor, whom the court ordered to give notice of removal to the midwife, and to pay to the "functionary" five hundred francs damages.

A GREAT number of chemists and apothecaries in Glasgow have lately been informed against for selling spirit of wine. In a recent week twenty-four individuals were summoned in consequence before the magistrates of that city, and a meeting of medical men and druggists was accordingly held to concert measures for their mutual benefit and defence. Surely it is high time that a special exemption from the duty of taking out a licence to sell spirituous liquors should be made in favour of those who retail medicines; for, on even considering the matter in a trading light alone, the quantities in which alcohol (unmedicated) is sold by druggists is too insignificant to affect the public revenue to any but the most trifling extent.

MR. SOUTH has been elected one of the surgeons to the Female Orphan Asylum, in the place of Mr. Tyrrell, deceased.

MR. LE GROS CLARK has become assistant-surgeon to St. Thomas's Hospital.

DR. BRIGHT, for many years the *nominal* senior physician to the Westminster Hospital, has resigned his appointment. We believe we are quite correct in saying that during the very many years that Dr. Bright was physician to the hospital he never on any one occasion gave a clinical lecture! His visits were so "few and far between," that many of the perpetual pupils did not even know the person of their *respected teacher*. Dr. Basham, who has for many years past been connected with the hospital, is confidently spoken of as Dr. Bright's successor. At the last election of physician to fill up the vacancy caused by the retirement of Dr. Burne, Dr. Basham's claims were not a match for the opposition brought against him by Dr. Kingston.

PROFESSOR DANIELL, of King's College, has been made a D.C.L. of the University of Oxford.

IT is reported that Mr. White intends shortly to give up his place as senior surgeon to the Westminster Hospital.

THE medical officers of St. Thomas's Hospital are endeavouring to establish a clinical society at that hospital. They attribute much of the "success" of Guy's School to the "*clinical society*" of that institution.

DR. GRIFFITH has lately made some researches on the nature of molecular motions in substances impalpably divided. With respect to those occurring among particles of insoluble bodies in water, he denies that they are to be attributed, as has been supposed, to evaporation of the fluid, inasmuch as they continued when this process was cut off by inclosing the fluid and particles between two pieces of glass, evaporation at the edges also being prevented by a rim of olive or almond-oil, or lamp-black mixed with gold-size. He says (Med. Gaz.), "I have examined a large number of inorganic substances powdered in a mortar to the finest powder, and have found no difficulty in detecting the peculiar motion in any substance save semi-fluid bodies, or solids which cannot be reduced to a sufficiently fine powder. The motion is quite destroyed by immersion in oil, thick gum, or syrup; here the viscidity of the liquids seems to prevent its taking place. It has appeared to me to ensue most readily in water, less so in spirit, and least of all in ether. The movement is totally different from that of particles which are moved by currents excited by evaporation. These latter hurl a number of molecules in vortices with great rapidity; in the true molecular movement the molecules oscillate or vibrate, moving but very slowly from place to place: in some cases we can clearly perceive a single molecule quite distinct from others, and enjoying its own *spherical* movements." True molecular motion is due, 1st, to an extreme subdivision of the matter; 2ndly, to a relation between the specific gravity of the molecule and the medium that shall admit of its free suspension; 3rdly, to absence of all viscidity in the liquid. Under these circumstances any kind of matter, organic or inorganic, will exhibit this motion. The cause of the motion is yet unknown; it has not appeared, in the hands of Dr. Griffith, to be influenced by electricity.

THE mesmerists have recently been attacked in the pulpit, at Liverpool, by that noted declaimer the Rev. HUGH MCNEILE, who directly charges them with being the agents of Beelzebub, if they *do* produce any effects on patients, though he doubts that mesmerism is anything else than a fraud, not possessing the importance which necessarily belongs to dealings with Satan. If it *be* a science, he demands that its laws be demonstrated, until which he cautions all Christians to avoid the lectures of mesmerists. A beneficed clergyman, who has given us his name and address, has replied to Mr. MCNEILE (under the signature of "G. S.," in a printed letter), because *he* "believes mesmerism to be a mighty remedial agent, mercifully vouchsafed by the beneficent Creator for the mitigation of human misery." To quote more at large opinions that are so opposite is out of the question. Indeed we cannot but smile at each theologian for seriously attacking and seriously defending the proceedings of the mesmerists, after the complete exposure of the roguery which took place in Bedford-square, in 1838, on the most memorable occasion that has yet happened for practising the art on the one hand and detecting its trick on the other. The whole matter was published in THE LANCET at the time, vol. ii., 1837-38, page 805, so that there is no excuse for entertaining doubt of the fraud.

AN evil is complained of at Edinburgh as contributing yearly to diminish the number of graduates at that university. It is said to be perfectly evident to all who are attending in the Scottish capital that of two of the professors the suns, although they blazed for a long series of years with much brightness, are now near their western horizon. The fact is mentioned in Edinburgh without any invidious feeling, because there are two parties always to be considered on these occasions, the professors and *the students*,—the teachers and *the taught*. Dr. Hope has long been one of the ornaments of chemistry in this country, and his discoveries most valuable; but his powers of lecturing and distinct articulation now fail him; and although his name will be remembered as long as science exists, his ability as a *lecturer* is now nearly extinct. Dr. Monro, too, has also lost his power of demonstrating, and has of late years acquired a manner of lecturing which is considered to have had a very depreciating effect on the attendance at Edinburgh. It is an object of serious inconvenience at any university when it has not at its disposal a retiring fund for professors. It is not desirable that such men as Drs. Hope and Monro should be exposed to the consequences which in their classes they have experienced during the last two or three years. Those professors have, in fact, no longer any command over them. As to the students who now avoid the university,—the Irish students, more especially, have gone to other universities—on inquiring the reason from any one who is acquainted with the facts the reply is, "It is because the classes of Drs. Hope and Monro are imperative on students graduating, for it was the cheapness

of college classes, the small expense of living in Edinburgh, and the fame of the professors, all combined, that rendered the university so desirable a place for many of the pupils. Amongst the students, generally, the remedy is considered to consist either in Drs. Hope and Monro retiring, or for the senatus to declare that their lectures shall no longer be compulsory."

THE following ingenious notification appeared in a late number of the "Wochensblatt" (weekly newspaper) of the German duchy of Anhalt-Köthen:—

"The lying-in establishment founded by myself last year, and specially and exclusively appropriated to *unmarried females of the upper classes*, has succeeded beyond my expectations; and the number of young persons, both from the town (Köthen) and its immediate neighbourhood, who apply for admission, has increased to much, that I am under the necessity of immediately removing my establishment to a large mansion which I have purchased for the purpose. Henceforth, as hitherto, ladies disposed to honour me with their confidence will find their secrets inviolably kept, &c. &c. — MARIA HOEFELER."

A CONTEMPORARY surmises that the certificate of the Pharmaceutical Society is used by certain chemists and druggists, members of that society, to induce the public (by its exhibition) to believe that they have got a licence to practice medicine. The writer rates away—on what specific evidence we know not — that the "Pharmaceutical Society, although under proper guidance it may eventually produce much good, is thus a party to a gross abuse, and the intentions of its founders are disgracefully prostituted. It behoves the authorities of the society (continues the writer) that they should maintain the respectability of their body by excluding from their ranks all such persons, and directing their efforts to expose those members who usurp the duties of the medical practitioner, not only by counter-practice, but by visiting and attending patients at their own homes," &c. &c. This is all a fuss about nothing; for the public so little value the licences and diplomas of the existing medical bodies, that if man or woman is to be found in the United Kingdom who ever asked a medical practitioner, before prescribing, whether he belonged to any college, hall, or university whatever, that man or woman ought to be shown as a curiosity to sight-seers at Charing-cross for a shilling a head; and the public will not begin now to ask questions of druggists because the Pharmaceutical Society is established. Moreover, the Pharmaceutical Society has other fish to fry than its own members, especially with the sauce of its own "diploma." We advise those who doubt this to turn to our articles on the designs of the society in THE LANCET at the time that the project of embodying and chartering the chemists and druggists was first set on foot.

ROYAL COLLEGE OF SURGEONS IN LONDON.

LIST of gentlemen admitted members on Friday, June 30, 1843:—J. Fox, W. H. Attree, W. H. Saxton, C. O. Baylis, L. A. Lawrence, T. Hall, P. W. Thompson, J. Carruthers, R. F. Hodges, E. Hanks, R. Clark.

BOOKS RECEIVED.

The Stutterer's Friend; or the Plea of Humanity and Common-sense against two Publications, one called "A Treatise on the Nature and Causes of Stammering," and the other, by Mr. Yearsley, entitled, "Stammering and other Imperfections of Speech treated by Surgical Operations on the Throat." By James Wright, Esq., S.C.L., &c. London: Sherwood, 1843. Pp. 56.

The True Law of Population shown to be connected with the Food of the People. Second Edition. By Thomas Doubleday, Esq. London: E. Wilson, 1843. 8vo, pp. 306.

CORRESPONDENTS.

Laboratorius.—There is no doubt that wine and beer are adulterated to an enormous extent in England; indeed, so generally is it practised, that it would be difficult to point out the retail dealer or wine-merchant who does not fall in with the general custom. The practice is certainly detrimental to public health, although it is pursued with apparent impunity, our present laws seeming to be powerless in checking the admixture of cocculus indicus, tobacco, sulphate of iron, acetate of lead, tartrate of potash, and other poisons of that kind, in fermented liquors. In France the wine-merchants are immediately under the cognizance of the Board of Public Health, whose officers may enter public prosecutions against parties who falsify or adulterate wines that have been issued for sale. A case was tried before the Tribunal of Correctional Police in November last, in which the defendants, though proved not to have infused *poisonous* ingredients, yet, for having adulterated their wines, were condemned to suffer imprisonment and pay five hundred francs. Our correspondent would find his project largely tax his time, his patience, and his pocket; but he might effect infinite good by sparing neither.

A Surgeon of Bristol.—The first question we cannot answer. Replies to the others will be found in the following statement:—

A house-surgeon to the Bath United Hospital is required to be a member of the College in London. He is appointed by the surgeons, subject to the approval of the committee. He serves for a year, and pays forty guineas for the appointment. He is boarded and lodged in the hospital. On being approved of by the committee he signs a paper binding himself to observe and obey the laws of the hospital, and to forfeit all his money if expelled for violating any law or regulation; but we know of no law, assented to by both parties, under which he could be expelled for "disrespectful conduct to the board," though there is a general law giving the committee discretionary power in all matters not provided for. The committee is, in a great measure, a self-perpetuating body. In the case of Mr. Sargeant we believe the surgeons returned to that gentleman one half of the money which he had paid to them.

Sir,—Allow me, in your valuable Journal, to ask when the next division of Dr. Tweedie's "Library of Medicine" will be published, and what that division is to be? The last (a translation of Cruveilhier's Anatomy) has been published some time, and when we consider the long interval that has elapsed between the completion of these two divisions, we have reason to expect a speedy issue of a new volume, but as no mention has ever been made of the intention to continue this work, I take the liberty of asking the question through the columns of THE LANCET. Your obedient servant,

July 5th. A STUDENT.

MEDICAL EVIDENCE.—Sir: If a surgeon has attended a pauper or a lunatic patient who has died from an injury, is the coroner at the inquest justified in summoning, and can he according to law, summon and take the evidence of another surgeon; for instance, one who has never seen the patient, and record the verdict without the evidence or presence of the surgeon who was in attendance on the case? Again, if a pauper who has been attended by a surgeon dies at the union-house, and the board of guardians direct the surgeon to be summoned by the beadle at the inquest, can the coroner countermand that order of the guardians, and oblige the foreman of the jury to pronounce the verdict of the jury without hearing the evidence of the surgeon?

*** We reply that the coroner can legally act in the manner described, excepting that he cannot *compel* the foreman to return a verdict in the absence of the surgeon in the second case, with reference to which it may be stated that if the foreman formed one of a majority of the jury who demanded the presence of the surgeon, then the coroner would act illegally if he did not obey that demand, and cause such surgeon to be summoned; but if the foreman act as described only in his individual capacity, then the coroner is not compelled to comply with the request of that member of the jury. We could not say how far the coroner would be violating the usual courtesies of his office in the first case put, unless the particulars were more minutely described.

A correspondent, under the signature of *Query*, addresses a note to Dr. E. Hunt, of River's-street, Bath, in which he says, "In THE LANCET of the 17th of June, you have kindly given to the public a most interesting statement of facts, as a caution to the public against being led away by specious and absurd systems; but surely you should have openly denounced the establishment *by name*, where the disgraceful occurrence alluded to in your letter took place; allow me, therefore, to hope that in the next LANCET you will supply the omission pro bono publico, for the public good.—July 3rd."

*** After the above was in type the following was received by the Editor:—"Sir,—Doubt having been thrown on the veracity of the case of the assistant in a linendraper's establishment in this city, as reported at page 416 of THE LANCET, I beg to say that it has since received further confirmation. I am, Sir, your obedient servant, E. HUNT.—River's-street, Bath, July 4th.

Chirurgicus can, undoubtedly, recover every farthing of the debts if the charges are of reasonable amount—such, that is, as a jury would be likely to assent to give him in a verdict on an action at law.

An answer to *M.R.C.S.L.* (Birmingham) would have occupied more space than it is consistent with our rules to devote to such a reply. Moreover, the details may as readily be derived in a library at Birmingham as in one in London.

A Constant Reader (Southport).—It is *not* usual for the class of persons named to take apprentices for the purpose particularly specified. It is not necessary for any legal purpose to serve a six years' apprenticeship, nor that the druggist should pass an examination before "setting up shop," or in order to obtain the power of recovering debts at law.

An Afflicted Parent asks advice respecting "the cure of such disorders." The disorder is one of the inclination, and on that any sensible person can give as good advice as a medical man.

The communication of *E. H. P.*, received too late for insertion under any circumstances in the present number, is an advertisement.

In the motto to Mr. Prater's paper (ante, p. 500, read *Principiis* for "Principii."